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July 1984

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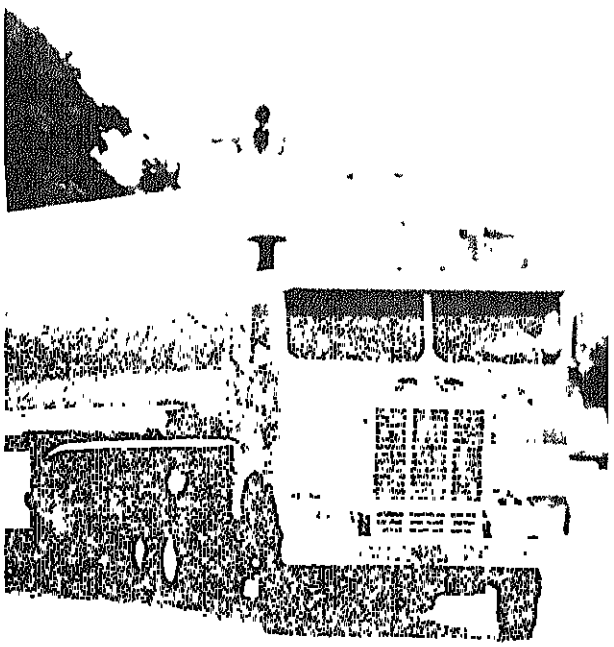
This Month in the PSM

This issue of the *Petroleum Supply Monthly* presents EIA's "Winter 1984-1985 Distillate Fuel Oil Outlook," beginning on page xiii, and a "Distillate Fuel Oil Overview," beginning on page xv. These articles focus on the respective roles of production, imports, and stocks in meeting distillate fuel oil demand. Regional supply patterns, especially for the East Coast, are also discussed.



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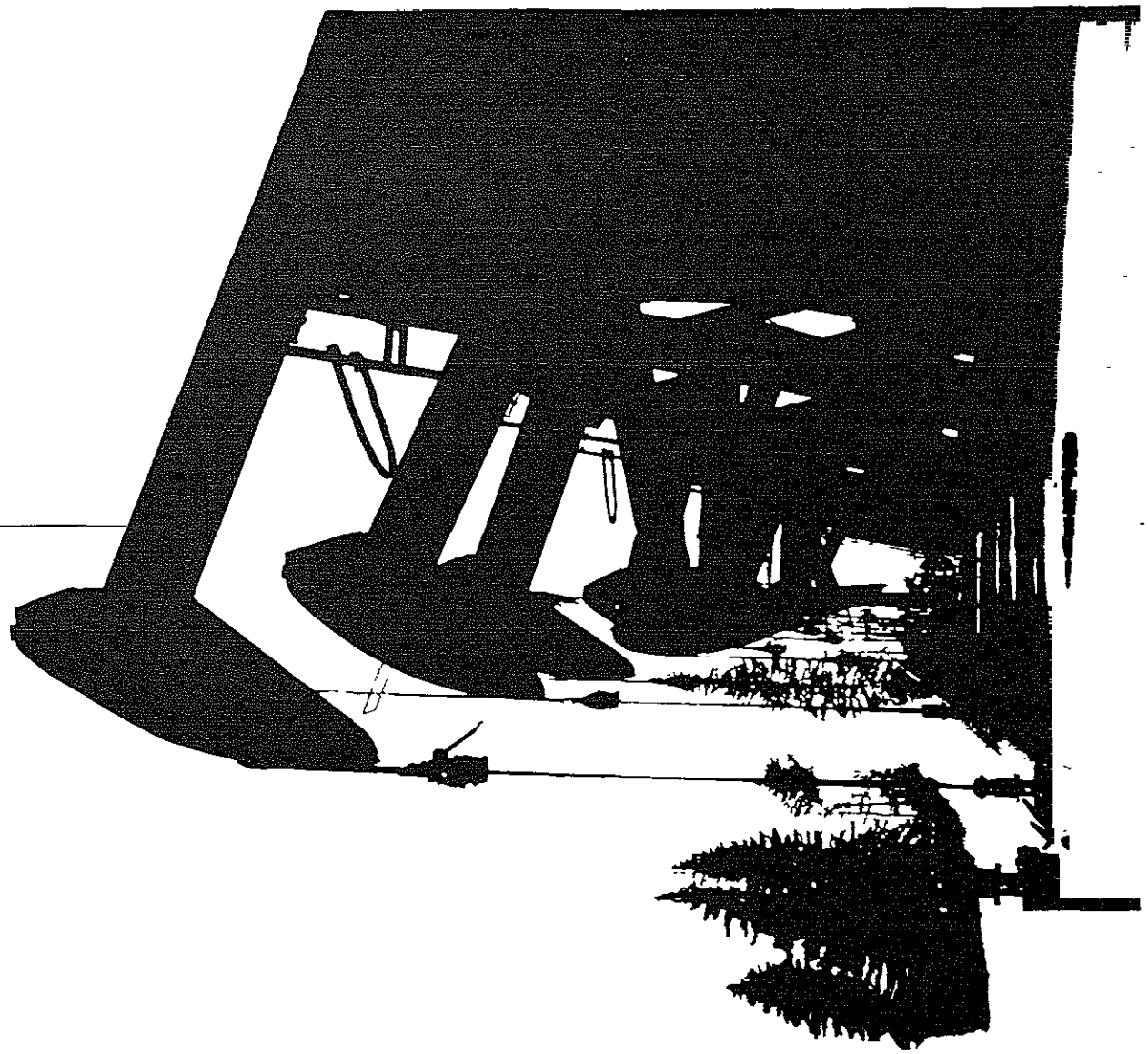
Conoco, Inc., page v (Courtesy of American Petroleum Institute Photo Library).

Articles

Feature articles on energy-related subjects are frequently included in this publication. The following articles have appeared in previous issues of the *PSM*.



Petroleum Supply Summary

Average Volume for Period (Million Barrels Per Day)	August 1984	August 1983	August % Change	Cumulative January Through August 1984	Cumulative January Through August 1983	Cumulative January Through August % Change
Products Supplied						
Motor Gasoline	6.9	6.9	0.2	6.7	6.6	1.5
Distillate Fuel Oil	2.6	2.5	3.4	2.9	2.6	10.6
Residual Fuel Oil	1.2	1.4	– 14.2	1.4	1.4	0.2
Other Products	4.9	4.6	5.7	4.8	4.4	8.6
Total	15.6	15.5	1.0	15.8	15.0	5.0
Crude Inputs to Refineries	12.5	12.2	2.8	12.1	11.6	4.1
Production						
Crude Oil, Natural Gas Liquids, and Other[1]	10.5	10.3	2.1	10.4	10.3	1.1
Imports						
Crude Oil[2]	3.1	3.9	– 20.3	3.2	3.0	6.9
SPR	0.2	0.4	– 43.4	0.2	0.2	– 12.8
Products	1.5	1.9	– 22.1	2.0	1.7	19.3
Total	4.8	6.2	– 22.1	5.4	4.9	10.1
Exports						
Crude Oil	0.1	0.2	– 37.2	0.2	0.2	1.7
Products	0.4	0.5	– 12.6	0.5	0.6	– 19.7
Total	0.5	0.7	– 19.2	0.7	0.8	– 15.0
Stock Withdrawal						
Crude Oil[2]	0.3	– 0.4	—	(s)	(s)	—
Products	– 0.1	– 0.3	—	– 0.1	0.2	—
Stocks at End of Period (Million Barrels)						
Crude Oil						
SPR	429	352	22.1			
Other	343	349	– 1.7			
Total	772	700	10.3			
Products						
Motor Gasoline[3]	228	226	0.6			
Distillate Fuel Oil	136	142	– 4.5			
Residual Fuel Oil	43	48	– 10.4			
Other	332	342	– 3.0			
Total	739	759	– 2.7			
Total Crude Oil and Products	1,511	1,460	3.5			

1 Includes alcohol and other hydrocarbon liquids.
2 Excludes Strategic Petroleum Reserve (SPR).
3 Including blending components.
(s) = Less than 0.05 million barrels per day.
NOTE: Percent changes are based on unrounded values. August 1984 data are estimates based on weekly data, except for exports, NGL production, other hydrocarbons, and alcohol which are July 1984 monthly values. Totals may not be equal to sum of components due to independent rounding.
Source: Energy Information Administration, *Petroleum Supply Monthly*, July 1984.

Winter 1984-1985 Distillate Fuel Oil Outlook

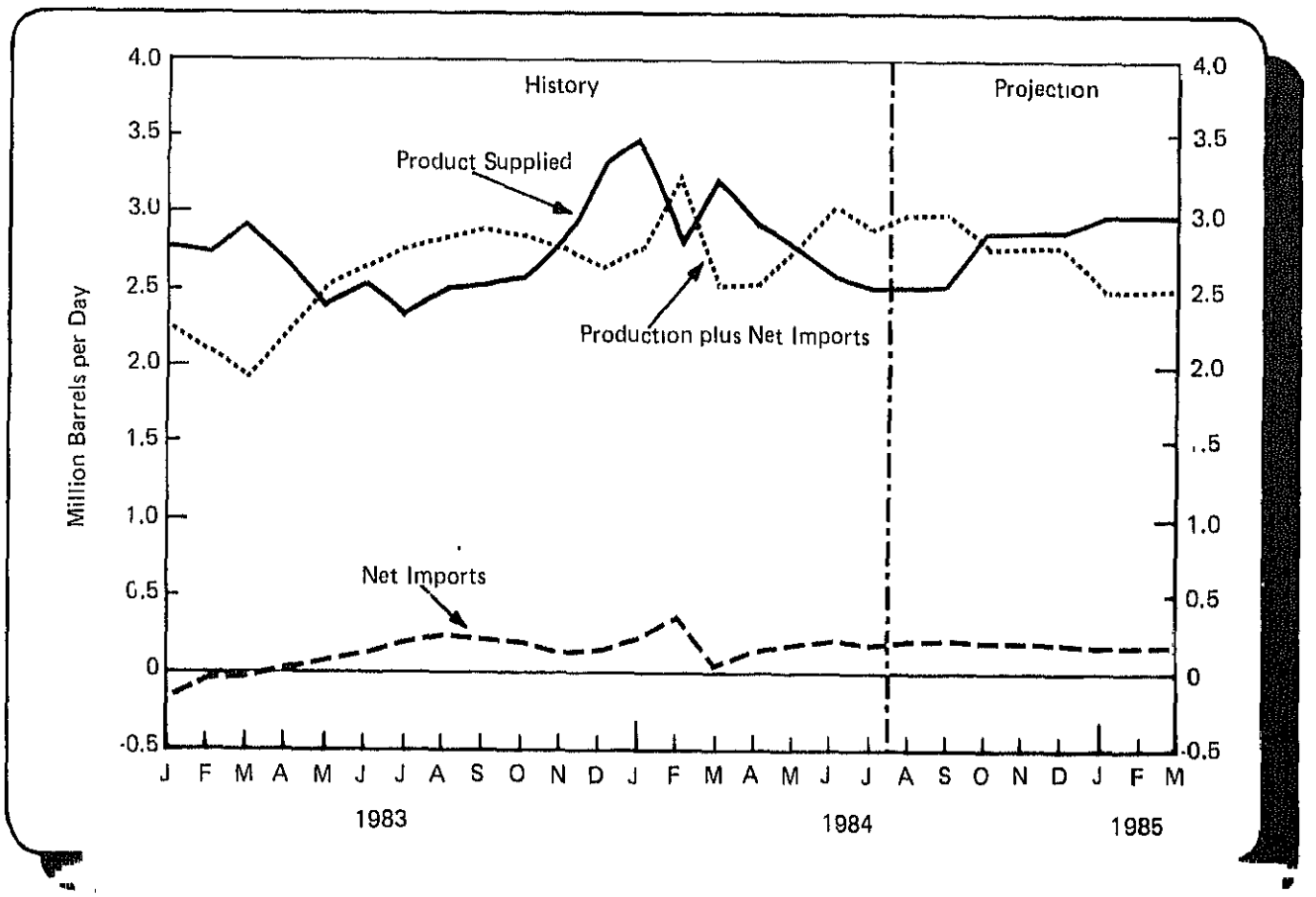
Distillate fuel oil demand during winter (October through March) 1984-1985 is expected to be 3.0 million barrels per day, slightly less than winter 1983-1984 demand.[1] Demand for diesel fuel oil should be strong because of the continued strength in the economy but, assuming a return of normal weather, demand for heating oil should be weaker. Nationally, supply problems are not anticipated because crude oil supplies are ample (despite Persian Gulf hostilities) and the capability to increase refinery production exists. Refinery production is expected to be about 4 percent below last winter's level, while imports and distillate inventory withdrawal are expected to be about the same magnitudes as in winter 1983-1984. According to the Energy Information Administration's *Short-Term Energy Outlook*, demand in fourth quarter 1984 and first quarter 1985 should be about equal, 2.9 and 3.0 million barrels per day respectively (see Figure 1).

Forecast variables and assumptions that affect the expected level of demand include economic activity, refiner acquisition cost of crude oil, distillate prices, and the weather. For the winter months, the *Outlook* assumes normal weather, crude oil prices about $28.74 per barrel, residential heating oil prices about $1.10 per gallon, and continued economic growth. Because the *Outlook* assumes normal weather, a normal level of consumer demand for heating oil is expected. For each 10-percent increase in the number of heating degree days (from the base assumption of normal weather) during the first and fourth quarter, the *Outlook* estimates that petroleum consumption would increase by an average of 270,000 barrels per day. Measured in heating degree days, last winter was 4 percent colder than normal, but December-January was 12 percent colder than normal.[2]

In late December 1983, a cold snap hit the Gulf Coast and the eastern half of the United States almost simultaneously. Because of the cold weather, production at several Gulf Coast refineries was curtailed for periods ranging from 1 day to 2 weeks during December and early January. This decline in Gulf Coast production accounted for the December decline of 0.2 million barrels per day in national production from November levels. Because production fell in the Gulf Coast region, loadings of product for shipment to other regions fell just as cold weather in the Central Atlantic, New England, and East North Central regions increased consumption of heating oil. Inventories fell sharply, particularly in the East Coast region, in December and January. By the end of January 1984, East Coast inventories were 28

[1]Energy Information Administration, *Short-Term Energy Outlook* (August 1984), DOE/EIA-0202(84/3Q) (Washington, D.C., August 1984).
[2]Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(83/11-84/01) (Washington, D.C., November 1983-April 1984).

Figure 1. Distillate Fuel Oil Supply and Demand, January 1983 - March 1985



Source: Energy Information Administration, "Petroleum Supply Monthly," DOE/EIA - 109(84/07), "Short-Term Energy Outlook," DOE/EIA - 0202(84/3Q)

million barrels below year-earlier levels. Between December and February, U.S. prices for residential heating oil increased from $1.07 per gallon to $1.17[3], while East Coast prices increased from $1.08 to $1.20.[4]

Distillate fuel oil is used as a heating fuel and as a transportation fuel. In the last decade, distillate fuel oil has been diminishing in importance as a heating fuel because households are both conserving and converting to other fuels.[5] However, heating remains its major function in the winter, particularly in the Central Atlantic, the New England, and the North Central regions of the United States.[6] The winter demand for heating fuel accounts for the wintertime peak in demand for distillate fuel oil.

In 1983, the transportation sector (on-highway use, railroads, and marine shipping) accounted for almost 50 percent of distillate demand.[7] From year to year, the demand for diesel fuel varies with the level of economic activity. Because industrial production is projected to grow by 7 percent this winter over last winter, the demand for diesel fuel oil is also expected to be strong, though somewhat dampened by the 6-cent-per-gallon increase in Federal diesel taxes effective August 1, 1984. The expectations for heating oil and diesel oil demand are combined in the distillate fuel oil outlook for winter 1984-1985 of 3.0 million barrels per day and for calendar year 1985 of 2.8 million barrels per day.

Domestic refining, imports, and withdrawal from inventories are the methods for supplying distillate fuel oil demand. Refinery production accounts for most of the distillate supply each year; however, the importance of refinery production to meeting current demand varies during the year. During peak demand periods in winter, some demand is satisfied by reducing inventories or by importing. At other times of the year refinery production exceeds current demand and the product is added to inventory for later use.

Crude oil is available for distillate production this winter. Crude oil stocks at the end of August 1984 were 343 million barrels, about the same as a year earlier and well above the minimum operating inventory level of 285 million barrels estimated by the National Petroleum Council.[8] Although refinery capacity is lower this year than last year and refinery inputs are up, additional refinery capacity remains available. Refinery utilization rates in the first 7 months of 1984 ranged between 73 and 77 percent. However, a decision to increase refinery output of distillate fuel oil also depends upon demand for the other products that are produced simultaneously, particularly gasoline. When total product demand is considered, suppliers may find distillate imports and inventory reductions more attractive.

In the last 10 years, net imports of distillate fuel oil, which arrive mostly on the East Coast, have represented between 1 and 10 percent of the product supplied. Last winter, net imports averaged 203,000 barrels per day, but in February 1984, after prices for distillate fuel oil increased sharply,[9] imports reached levels not seen since 1977.[10] Distillate fuel oil was imported primarily from the Virgin Islands, the Netherlands, and Venezuela. In contrast, during the previous winter (1982-1983), exports exceeded imports by 9,000 barrels per day.

Withdrawal from distillate inventories is expected to contribute to product supply in the coming winter to about the same extent as last winter. Because interest rates remain high, the costs of carrying inventory are high. This acts as a disincentive for building and holding inventories in advance of demand. When combined with the fact that crude oil and product prices have been falling in recent months and the possibility that they may fall further, there has been less incentive for any of the primary stockholders—refiners, bulk terminals, or pipelines—to build and hold product inventories. Consequently, end-of-August 1984 inventories, 136 million barrels, were slightly (4 percent) below August 1983 inventories. Stock levels this fall are expected to peak at about the same levels as last year (see pages 12-13).

Each region of the country produced enough distillate fuel oil in 1983 to satisfy at least 75 percent of its demand except the East Coast, which is the major consuming region in the winter. In 1983, the East Coast produced about a quarter of its annual demand, received half of its product from other parts of the United States, chiefly the Gulf Coast, imported about a sixth, and drew from inventories for the remainder. Because of these supply solutions, transportation timing and costs are particularly important to the East Coast. Distillate imports from Europe and Western Hemisphere countries can often reach the East Coast in less time than production moved from the Gulf Coast. Regional product inventories are used to satisfy demand while the product is being shipped.

The outlook for winter 1984-1985 is for a slight decline in distillate demand from last winter's demand. Readily available crude oil supplies and refining capacity will be used to meet product demand with current production. Nationally and regionally, product inventories will be built to slightly lower levels than last year and product stock reductions should have about the same role to play as last year. Imports of distillate fuel oil may again be important if East Coast demand surges occur which cannot be met from regional inventories or timely interregional movements.

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[3]Energy Information Administration, *Monthly Energy Review*, *DOE/EIA-0035(84/04)* (Washington, D.C , July 1984), p. 97.

[4]Energy Information Administration, *Petroleum Marketing Monthly*, DOE/EIA-0380(84/01 and 84/03) (Washington, D.C., January 1984 and March 1984), Table 18, January 1984 and Table 25, March 1984.

[5]Energy Information Administration, *Annual Energy Review 1983*, DOE/EIA-0384(83) (Washington, D.C., April 1984), p. 19.

[6]Energy Information Administration, *Petroleum Marketing Monthly*, DOE/EIA-0380 (Washington, D.C., December 1983[2]-March 1984), Table H1 and Table 24, December 1983[2]; Table 32, December 1983[3]; Table 39, February 1984; Table H1 and Table 39, March 1984.

[7]Energy Information Administration, *Petroleum Supply Annual 1983*, DOE/EIA-0340(83)/1 (Washington, D.C., June 1984), pp. 119-133. For a discussion of data sources for 1983 deliveries, see pp 130-133.

[8]National Petroleum Council, *Petroleum Inventories and Storage Capacity: A Report of the National Petroleum Council* (Washington, D.C., June 1984), p. 3.

[9]Energy Information Administration, *Weekly Petroleum Status Report*, DOE/EIA-0208(84-35) (Washington, D.C., August 30, 1984), *pp. 20-21 and 17.*

[10]Energy Information Administration, *Petroleum Supply Annual* 1981-1983, and *Petroleum Statement Annual* 1973-1980.

Distillate Fuel Oil Overview

Distillate fuel oil competes with other petroleum products and non-petroleum energy sources in heating, transportation, and industrial uses. Since 1973, the prices for all energy sources, including distillate fuel oil, have risen, resulting in general energy conservation. At the same time, the relative prices of competing fuels have shifted, as some prices rose more than others. The following article describes how demand for distillate fuel oil has changed since the 1970's. It reviews how the fuel is supplied, noting the important roles played by inventories and transportation networks. Finally, it reviews some of the price series available for tracking the interaction of distillate demand and supply.

Demand for Distillate Fuel Oil

Demand for distillate fuel oil peaked in 1978 at 3.4 million barrels per day and fell each year after that until 1983. Because of economic recovery and an unusually cold December, distillate demand steadied, remaining at 2.7 million barrels per day last year. Demand in the first 8 months of 1984 averaged 2.9 million barrels per day, compared with 2.6 million barrels for the same period in 1983. Demand in 1984 has been strong, because a cold winter and economic recovery have strengthened all the components of distillate fuel oil demand.

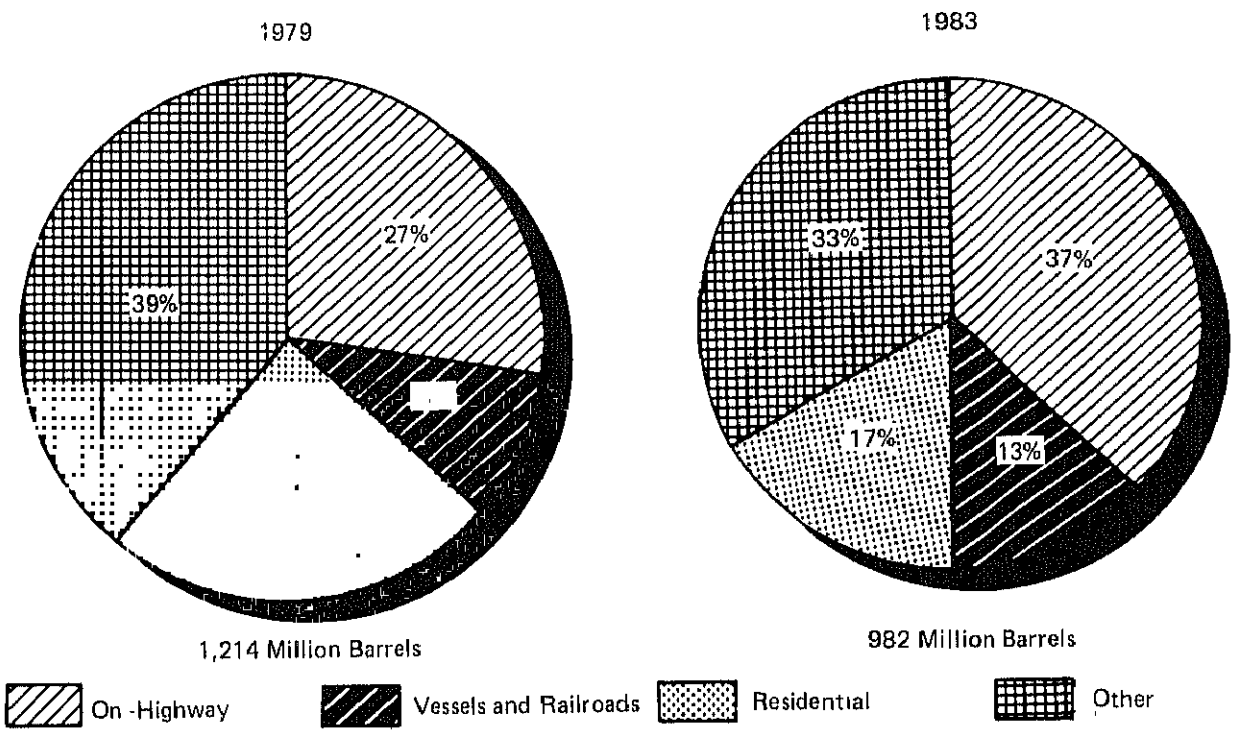
Distillate fuel oil includes No. 1, No. 2, and No. 4 fuel oils and No. 1, No. 2, and No. 4 diesel oils (see Glossary). These oils get progressively heavier from No. 1 to No. 4. The largest share of distillate fuel oil is No. 2 oil. The heating oils and diesel oils are alike in most respects except that diesel oil must also meet cetane-number[1] specifications which a fuel oil may or may not meet.

The transportation sector (vessels, railroads, on-highway vehicles) accounted for 50 percent of distillate fuel oil deliveries in 1983.[2] On-highway vehicles accounted for 37 percent of distillate deliveries in 1983, up 10 percent from 1979 (see Figure 1). On-highway vehicle consumption was one of only two end-use categories that increased volumetrically as overall consumption declined.

Although diesel automobiles have increased their market share only slightly in recent years, the diesel engine completely dominates the large-size truck fleet and is

[1]Cetane numbers are index numbers which describe the ease with which the oil ignites in a diesel engine.
[2]Energy Information Administration, *Petroleum Supply Annual 1983*, DOE/EIA-0340(83)/1) (Washington, D.C., June 1984), pp. 119-133.

Figure 1. Deliveries of Distillate Fuel Oil by Use, 1979 and 1983



Source: Energy Information Administration, "Petroleum Supply Annual 1983," DOE/EIA - 340(83)/1.

increasing its share of the mid-sized and smaller truck fleets. The diesel fuel market has continued to expand because this fuel offers better value per measure of energy content than motor gasoline, which has been the major fuel alternative In 1983, the transportation sector spent only $8.67 per million British Thermal Units (Btu) for distillate fuel oil but spent $9 79 for the same amount of energy from motor gasoline[3] (see Table 1). Earlier in the 1970's, the advantage to using diesel fuel over motor gasoline had been even greater and high-mileage truck operators chose the diesel engines available to them. Most passenger car operators have not chosen diesel automobiles because equipment costs and engine performance were not attractive.

The residential sector (houses and residences with between one and four units) accounted for 17 percent of all distillate fuel oil deliveries in 1983.[4] More households use natural gas and electricity for residential heating than distillate fuel oil. According to the latest Energy Information Administration (EIA) Residential Energy Consumption Survey, 12.1 million residences used fuel oil or kerosene as their main heating fuel in 1982.[5] Over 17 million households used fuel oil as their main heating fuel in 1973. Distillate fuel oil has cost between 30 and 42 percent more than natural gas since 1973. Electricity has always been more expensive than distillate fuel oil but its relative cost has been reduced from 4.2 times the cost of distillate fuel oil in 1973 to 2 6 times as much in 1983 (see Table 1). Where heating is not a major end-use, as in the South and Southwest, the capital investment required to burn distillate fuel oil makes electricity attractive.

Diesel fuel demand is about the same throughout the year, but because heating oil use occurs in the winter, this is when distillate demand peaks. EIA's surveys of sales of these fuels by refiners and natural gas plant operators show the seasonal patterns of diesel oil and fuel oil demand.[6] Between January 1983 and May 1984, heating oil sales were greatest in January 1984 (91.5 million gallons per day) and lowest in July 1983 (34.9 million gallons per day). January sales were about 57 million gallons per day more than July sales. The high and low months (May 1984 and February 1983) for diesel fuel sales differed by 25 million gallons per day.

The East Coast and Midwest together accounted for 66 percent of all distillate fuel oil deliveries.[7] The East Coast, Petroleum Administration for Defense (PAD) District 1, accounted for 37 percent of 1983 demand for distillate fuel oil, the largest proportion of any district. The East Coast was the leading consumer of distillate fuel oil in the residential, commercial, industrial, and electric utility sectors, where heating oil is the major type of distillate fuel oil consumed. The East Coast accounted for 74 percent of all residential sector consumption of distillate fuel oil. The consumption of heating fuel was even further concentrated. New York, New Jersey, Massachusetts, and Pennsylvania accounted for 50 percent of the Nation's residential sector consumption of distillate fuel oil. The Midwest (PAD District 2) accounted for another 29 percent of distillate fuel oil demand and led the Nation in consumption by the on-highway, farm, and railroad sectors.

Distillate Fuel Oil Supply

Distillate fuel oil is supplied through a combination of refinery production, imports, and withdrawal from inventories. The United States produces 90 percent or more of the distillate fuel oil supplied each year; so, on

[3]Transportation prices include the appropriate Federal excise tax and State road use taxes

[4]Energy Information Administration, *Petroleum Supply Annual 1983, op.cit*, pp 119-133.

[5]Energy Information Administration, *Annual Energy Review* 1983, DOE/EIA-0384(83/1) (Washington, D.C., 1984), pp. 17-19.

[6]Energy Information Administration, *Petroleum Marketing Monthly*, DOE/EIA-0380(84/01 and 84/05) (Washington, D.C., 1984), Table H1.

[7]Energy Information Administration, *Petroleum Supply Annual 1983, op. cit*, pp. 119-133

Table 1. Prices of Distillate Fuel and Selected Other Fuels by End Use Sector—1973, 1978, 1983, and 1990[1] (1983 Dollars per Million Btu)

	1973	1978	1983	1990[1]
Residential Sector				
Distillate Fuel Oil	3.37	5.13	7.88	9.29
Natural Gas	2.60	3.62	5.80	7.38
Electricity	14.28	17.01	19.02	19.51
Transportation Sector[2]				
Distillate Fuel Oil	3.23	4.76	8.67	10.07
Motor Gasoline	6.34	7.54	9.79	11.31
Liquefied Petroleum Gas	2.71	4.44	8.13	9.23
Average Price to All Users				
Distillate Fuel Oil	2.88	4.63	7.82	9.19
Motor Gasoline	6.34	7.54	9.79	11.31
Liquefied Petroleum Gas	2.71	4.44	6.70	7.80
Natural Gas	1.39	2.71	4.58	5.91
Coal	1 05	2.02	1.78	1.98
Electricity	11.18	14.53	18.05	18.51

[1]Projection based on midprice forecast.

[2]Transportation prices include the appropriate Federal excise tax and State road use taxes.

Source: Energy Information Administration, *Annual Energy Outlook 1983* (Washington, D.C., April 1984), Table A5.

Table 2. U.S. Distillate Supply by Region, 1983 (Million Barrels)

	PAD District					USA
	1	2	3	4	5	Total
Production	95	215	420	41	126	897
Imports	56	3	2	(s)	2	64
Exports	1	(s)	9	(s)	13	23
Stock Change	27	8	7	1	2	45
Net Receipts	183	57	−245	−3	8	—
Pipeline	150	47	−201	−3	7	—
Tanker and Barge	34	10	−44	0	1	—
Product Supplied	360	283	176	39	124	982

(s) = Less than 500,000 barrels.
Note: Total may not equal sum of components due to independent rounding.
Source: Energy Information Administration, *Petroleum Supply Annual 1983*, DOE/EIA-0340(83/1) (Washington, D.C., June 1984).

average, the national roles for imports and inventory changes are not large. Imports and inventory changes have more important roles to play regionally, because regional production capacities and demand levels do not always correspond.

In 1983, refinery production of distillate fuel oil was 2.5 million barrels per day. Refinery production accounted for 91 percent of national distillate fuel oil supply, down from 98 percent in 1982. The share of refinery production in 1983 was the lowest since 1974. In 1983, stock withdrawals represented 5 percent and net imports 4 percent of product supply.

Distillate fuel oil is produced from crude oil run through atmospheric distillation units and from unfinished oils run through vacuum distillation and cracking units. Distillate fuel oil which is to be marketed as diesel fuel oil must meet the same specifications for combustion temperature as heating oil and must also meet cetane specifications which assure that it will ignite quickly in diesel engines. Some distillate fuel oils, especially those produced from paraffinic crude oils, have sufficient cetane values after straight distillation, but others may need cetane enhancement at the refinery or elsewhere. Cetane values can be enhanced by additives, blending, or further refining processes. Such enhancement adds to production costs, however.

Other important quality specifications of diesel fuel oils are cloud point and pour point temperatures—temperatures below which wax crystals form and clog the fuel injection system of the diesel engine and the fuel flows poorly. The same paraffinic crude oils which provide the best cetane values have the worst problem with wax crystal formation and pouring. Consequently, distillate streams from crude oils of lesser cetane value but better cloud point and pour point properties are also useful in diesel fuel oil production. As diesel oil has grown more important in the distillate fuel oil market, more product is designed to its specifications. Product which meets diesel fuel specifications can be burned as heating oil, but heating oil cannot necessarily be burned as diesel fuel.

During winter 1983-1984, between 196 and 204 facilities produced distillate fuel oil, about 85 percent of all operating facilities. In 1983, as in the first half of 1984, from 10 to 12 facilities produced a quarter of U.S. distillate fuel oil production. About 42 percent of 1983 production took place in the Texas and the Louisiana Gulf Coast regions, parts of PAD District 3. PAD District 3 accounted for 47 percent of U.S. production, leading the Midwest, West Coast, East Coast, and Rocky Mountain regions, respectively. The major distillate consuming regions, the East Coast and the Midwest, produced 10.6 and 24.0 percent, respectively, of 1983 national production. In 1981, these regions accounted for 11.4 and 25.5 percent of national production.

Distillate fuel oil production is usually higher during summer, fall, and winter, and falls to lower levels in the spring. These changes in refinery output are achieved both by changing the level of inputs to the crude distillation units and by changing the configurations of the refining process to change yields. The yields of gasoline or distillate fuel oil from a given refinery can be changed by using different downstream units at the refinery and by using different crude oils. At the national level, the difference between early summer gasoline modes and winter distillate modes is usually no more than 4 or 5 percentage points in the yield rates.[s] However, specific refining districts and specific refineries can achieve larger changes in percentage yields. On average, however, the production of gasoline is twice as large as the distillate output. Since each barrel of distillate fuel oil produced is accompanied by several barrels of other products, the demand for these products can determine whether producing another barrel of distillate fuel oil is profitable. Imports or inventory reductions may be the preferred option for supply.

Since three regions produce more distillate fuel oil than they consume and two regions produce less than they consume, interregional transfers, imports, and exports are important in achieving an overall balance of supply and demand. Table 2 portrays how the Nation as a whole and each region individually met distillate fuel oil demand in 1983. The East Coast produced only 26 percent of its distillate fuel oil supply, imported nearly 16 percent, reduced inventories for nearly 8 percent, and received over 50 percent from other regions, particularly the Gulf Coast. The Midwest produced 76 percent of its distillate supply and, consequently, needed to receive only 20 percent from other regions. The Gulf Coast produced about 2.4 times its own demand and

[s]See, for example, Energy Information Administration, *Petroleum Supply Annual 1983*, DOE/EIA-0340(83/2) (Washington, D.C.: June 1984), Table 13, pp. 147-158.

provided most of the fuel transferred to the East Coast and Midwest

Distillate fuel oil is transported between PAD districts by product pipelines and waterborne tankers and barges. Both modes of transport are used to some extent in all regions except the Rocky Mountains (PAD District 4) where no waterborne transport is used The largest movement of product occurs from PAD District 3 to PAD District 1 and, of this product, most is moved by pipeline. The distance from Houston to the New York Harbor area by pipeline is nearly 1,600 miles. It takes about 3 weeks to move distillate fuel oil in the pipeline this distance. Although it takes only about 5-6 days to move product by tanker from Houston to New York, the cost is higher. Furthermore, the cost rises as more tankers are sought to ship larger volumes of product. However, shipments by tanker and barge are also important to PAD District 1 to deliver the product to terminals along the East Coast which are not close to pipelines. The Midwest receives 65 percent of its product transfers from the Gulf Coast; another 30 percent comes from the East Coast.

Net imports of distillate (gross imports minus exports) have represented between 1 and 10 percent of distillate supply in the last 10 years. In 1983, net imports of distillate fuel oil were 110,000 barrels per day and accounted for 4 percent of supply. In 1982, however, net imports were only 19,000 barrels per day which represented less than 1 percent of supply. Because of the early cold weather, net imports in the first 7 months of 1984 averaged 206,000 barrels per day. Net imports reflect the difference between gross imports and exports. Each of these can be analyzed independently, although both should respond to the same price signals since export controls were lifted in October 1981. That is, if U.S. prices for distillate are high relative to overseas prices, imports will rise and exports will fall.

Since the beginning of 1983, the quantity of gross imports reported monthly has ranged between 42,000 barrels per day in March 1983 and 458,000 barrels per day in February 1984. Imports in 1983 came from 23 different countries but the top 3—Virgin Islands, Venezuela, and Canada—accounted for 63 percent of all imports. In the first 6 months of this year, 25 countries have provided distillate fuel oil supplies, with the Western hemisphere countries of Virgin Islands, Venezuela, and Canada again the top 3 suppliers. Following a high level of February imports, the Netherlands is the fourth highest importer to date in 1984. In late January and early February 1984, the spot market prices for distillate fuel oil in New York were as much as $9 a barrel higher than in Rotterdam, drawing supplies from European sources.[9]

In 1983, about 88 percent of all distillate imports arrived in East Coast ports, 5 percent in the Midwest, and 3 percent each in the Gulf Coast and West Coast ports. Shipping time from the country of origin to New York Harbor, the major East Coast port, depends on distance but is frequently competitive with pipeline and waterborne shipments from the Gulf Coast. Shipping time to New York Harbor is about 5 days from the Virgin Islands and about 6 days from Venezuela. The transport time from Rotterdam is about 10 days.

Since the export of petroleum products was decontrolled in October 1981, distillate fuel oil has been the third or fourth largest petroleum export. In 1983, it accounted for about 11 percent of product exports, well behind residual fuel oil and petroleum coke. In 1983, about equal volumes of exports left the West Coast and the Gulf Coast. National exports have ranged, month to month, between 24,000 and 174,000 barrels per day since the beginning of 1982, depending on how U.S. prices compared with distillate fuel oil prices elsewhere in the world.

The remaining source for distillate fuel oil supply in a given year is inventory reduction. Distillate fuel oil inventories have been reduced each year since 1979, not only in terms of end-of-year inventory levels, but also in terms of average yearly stock levels. Stock reduction in 1983 was the largest since World War II. Stocks at the end of 1983 were 46 million barrels below inventory levels a year earlier. Contributing to this large change was a 1-month reduction of 21 million barrels in December 1983, caused in the latter part of the month by the sudden arrival of cold weather and curtailed production in the Gulf Coast. Distillate inventories have always been the most variable of the major product stocks, because demand is highly seasonal; however, the role of inventories is changing. During the 1970's and early 1980's, about 15 percent of summertime production was added to inventories for drawdowns in the fall and winter when production levels were below demand levels Production levels exceeded demand levels by only 7 percent in summer 1983 and about 8 percent this past summer.

Distillate Fuel Oil Inventories

Distillate fuel oil is held by three categories of stockholders—primary, secondary, and tertiary stockholders. Primary distribution system inventory holders are refiners, bulk terminals, and product pipelines. Secondary distribution system inventory holders are the wholesale distributors and retail outlets which buy the product to sell to final users. Tertiary inventory holders are those people or businesses holding product inventories for their own eventual use. They include households, farms, electric utilities, factories, governments, and many kinds of businesses such as trucking companies, shipping companies, construction companies, or any business that runs its own fleet of trucks or heats multi-residential or commercial space. The number of distillate fuel oil stockholders in the tertiary sector (including, for instance, about 12.1 million households)[10] is much larger than the number in the primary sector (about 530 facility operators in winter 1983-1984).[11] Since all products which pass into secondary or tertiary inventories pass through the primary distribution system, changes in inventory for the primary sector provide a key indication of change in end-use demand. Data on primary distribution system

[9]Energy Information Administration, *Weekly Petroleum Status Report*, DOE/EIA-0208(84-34) (Washington, D.C.: August 1984), pp. 20-21.

[10]Energy Information Administration, *Annual Energy Review 1983, op. cit.*, pp. 17-19.

[11]Unpublished data reported on forms EIA-810, "Monthly Refinery Report"; EIA-811, "Monthly Bulk Terminal Report"; and EIA-812, "Monthly Product Pipeline Report."

inventories published by EIA[12] are collected weekly and monthly by the EIA Petroleum Supply Reporting System.

These data indicate that the East Coast almost always holds the largest volume of primary sector inventories of distillate fuel oil. Inventory levels in that region build each summer and each fall and then drop during the winter heating season. Since 1979, at the point of highest national inventories in the fall, the East Coast has held between 44 and 49 percent of U.S. inventories. At the end of winter and during spring, other regions—the Midwest or Gulf Coast—sometimes have inventory levels higher than the East Coast, but East Coast inventories begin to build again during the summer. In 1983, the fall peak for distillate inventories in the East Coast was 43 million barrels higher than the spring low. This difference is about average for the differences since 1979, although the values of the seasonal highs and lows have fallen each year since 1979. The difference between fall and spring in the Midwest was about 17 million barrels in 1982 and 1983—more than the difference in 1980 and 1981, but half the difference in 1979. Other regions show very little variation.

Primary inventories are held in refineries, bulk terminals, and pipelines At any given time of the year, more product is held in bulk terminals than at either refineries or pipelines. Bulk terminal inventories are the most variable over the course of the year. In addition, as primary inventory levels have fallen in recent years, the largest reductions have occurred at bulk terminals. Average monthly inventory levels at bulk terminals were 31 percent lower in 1983 than in 1981, compared with 22 percent lower at refineries and 18 percent lower in pipelines

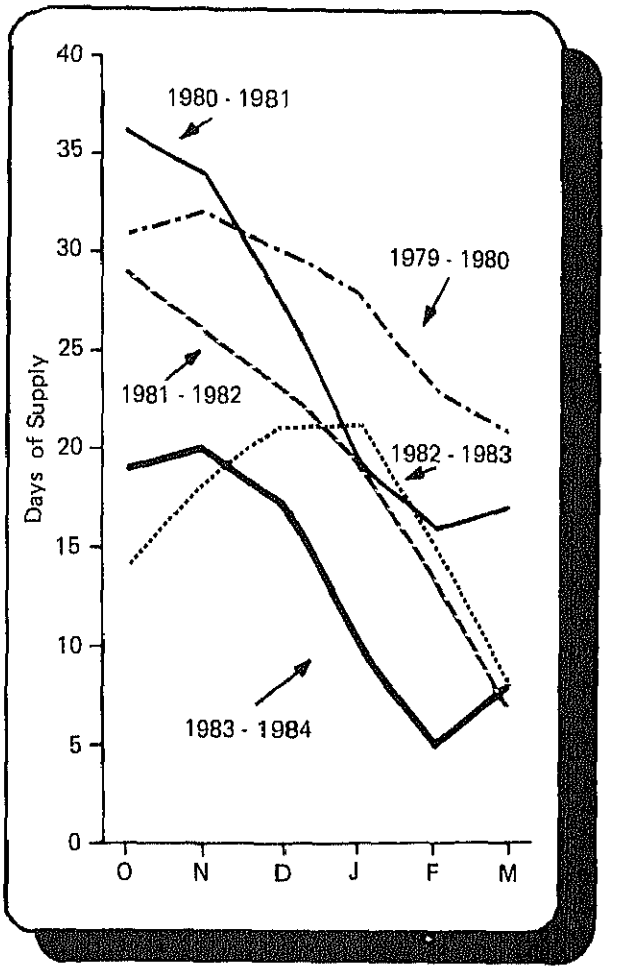
Inventories in the primary distribution system have fallen each winter since 1979-1980 by two measures:

- Average stock levels have fallen from 213 million barrels in winter 1979-1980 to 138 million barrels in winter 1983-1984
- Average wintertime "days of supply," an inventory concept which takes the level of demand into account,[13] fell from 27.5 days in winter 1979-1980 to 13.2 days in winter 1983-1984 (see Figure 2).

Another indication of changes in distillate inventory holding can be seen using the minimum operating inventory (MOI) level, defined by the National Petroleum Council as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its report released in November 1983, the Council lowered its estimate of the minimum operating inventory level for distillate fuel oil to 105 million barrels, from the 125 million-barrel level set in its 1979 study.[14] At its spring low, the level of distillate inventories fell below the minimum operating level (of 125 million barrels) for 3 months in 1982, and for 3 months in 1983. In 1984, inventories were below the lower MOI level of 105 million barrels in 2 months. Other products rarely fall below the minimum operating inventory level.

Several explanations have been offered for the reduction in distillate inventories. One of the most important is the reduction in distillate demand. Another reason given is a greater sense of security about crude oil supplies and crude oil prices that has reduced the desire to keep precautionary inventories. Higher interest rates (especially relative to the rate of inflation) have increased the cost of carrying inventories. In addition, when crude oil prices are falling, or may fall, there is hope that the product can be produced in the future from a cheaper raw material. In late 1982, crude oil prices fell sharply and other declines are considered

Figure 2. Days of Distillate Fuel Oil Supply, Winters 1979 - 1980 through 1983 - 1984



Sources: Energy Information Administration, "Petroleum Supply Monthly," DOE/EIA-0109(84/07), "Petroleum Supply Annual 1983," DOE/EIA-0340(83)/2 and predecessor reports; National Petroleum Council, "Petroleum Inventories and Storage Capacity: A Report of the National Petroleum Council."

[12]See Energy Information Administration, *Petroleum Supply Annual 1983*, DOE/EIA-0340(83/2) (Washington, D.C.: June 1984), Monthly Statistics Tables 2, 4-8, 18, and predecessor reports.

[13]Days of supply of inventory is calculated as: (beginning total inventory level minus minimum operating inventory level) divided by the daily rate of current product demand. See National Petroleum Council, *Petroleum Inventories and Storage Capacity: A Report of the National Petroleum Council* (Washington, D.C., June 1984), p. 30.

[14]National Petroleum Council, *Petroleum Inventories and Storage Capacity: A Report of the National Petroleum Council, op. cit.*

possible in 1984. Some observers claim that the development of futures contracts for distillate fuel oil is another reason that inventories are lower. In this argument, instead of holding physical volumes of inventory as a hedge against adverse price movements, stockholders buy contracts for the delivery of product at a future time at an agreed upon price. Most contracts do not, however, result in the delivery of "wet barrels" of product. The contracts are closed out by the exchange of money. They have functioned to limit the price risks of the buyer and seller of the contract.

The relative magnitudes of primary, secondary, and tertiary inventories can seldom be compared because regular measures of secondary and tertiary inventories are not made. However, the National Petroleum Council recently published results of a study of secondary and tertiary inventory levels. That study produced estimates of secondary and tertiary inventories on March 31, 1983[15] (see Table 3). Of the 268 million barrels of middle distillate inventories (including kerosene) on that date, 52 percent were held in secondary and tertiary storage. Most of the inventories were held by the residential sector, followed by the transportation sector and electric utilities.

Table 3. Secondary and Tertiary Inventories of Distillate Fuel Oil and Kerosene, March 31, 1983 (Million Barrels)

Secondary Sector	10
Bulk Plants	8
Retail Motor Fuel Outlets	2
Tertiary Sector	131
Agricultural	8
Commercial	5
Electric Utilities	22
Industrial	9
Military/Government	10
Residential	55
Transportation	23

Source: National Petroleum Council, *Petroleum Inventories and Storage Capacity*, June 1984.

Comparable estimates, by product, of secondary and tertiary inventories do not exist for other points in time. In a 1979 study on storage capacities, the National Petroleum Council did, however, estimate that, on average, about 60 percent of petroleum product inventories were held in secondary and tertiary sectors. The 1983 study indicates the proportion has stayed about the same; i.e., secondary and tertiary inventory volumes have fallen together with primary inventory volume. The same incentives to reduce storage—reduced demand, reduced risk, higher carrying charges, and hopes for lower prices—have probably affected bulk plants, retail fuel stations, and end users in the same way that they affected primary inventory holders.

Distillate Fuel Oil Prices

Distillate fuel oil prices are determined by interactions of demand and supply in a given market. Prices depend on what users are willing to pay for this fuel for heating or transportation and on what suppliers are willing to take as a return for their resources, labors, and capital.

The price that consumers are willing to pay depends on the strength of demand for a specific use, whether heating homes or fueling engines. In any year, demand strengthens when the weather turns cold or economic activity picks up. Demand falls over time as people learn how to conserve fuel or switch to cheaper fuels. Demand rises if distillate fuel oil is perceived as a better buy than another fuel. Diesel fuel use, for instance, has grown, because on a dollars-per-Btu basis, diesel fuel has been readily perceived as cheaper than motor gasoline. (A barrel of diesel fuel oil converts into 5.825 million Btu whereas a barrel of motor gasoline converts into 5.253 million Btu. Consequently, even though the economic advantage becomes more difficult to perceive as the price differential narrows between diesel fuel and motor gasoline, diesel fuel remains price competitive with gasoline until the price of diesel fuel reaches 1.11 times the gasoline price level.)

Costs to suppliers have increased for several reasons including increases in the price of crude oil and greater difficulty in getting marketable product as crude quality declines and product specifications rise. Higher interest rates also affect the costs of borrowing and of holding inventories. These changes in costs have resulted both in reductions in the quantity supplied and increases in the price of the fuel.

Distillate fuel oil prices are reported in a number of price series, each describing a different kind of transaction. Analyzing distillate price trends or relative prices requires some understanding of the types of transactions which are being represented. Transactions can differ according to a number of factors—type of oil, kind of market, region, season, or taxes.

Type of oil. Lighter oil is more valuable than heavier oil; e.g., No. 1 oil is more valuable than No. 4 oil because it burns at lower temperatures and burns more cleanly. This means it is easier to burn in cold weather in either diesel engines or furnaces.

Kind of market. Distillate fuel oil price series measure activity in retail markets, wholesale markets, spot markets, and futures markets. Price series exist for sales by refiners and other producers and by resellers and retail outlets. These prices differ because each product handler wants revenues to cover the costs of production or purchase and the costs of marketing and handling plus some profit margin. Large volume sales can mean lower marketing costs and can permit discounts; conversely, small volume sales incur more sales costs. Most retail sales of heating oil include delivery services which add to the price.

Sales of distillate fuel oil are made under long term contract, shorter term contracts, and on spot market basis. Contract sales help both the buyer and the seller plan and control price and supply. Product which is not acquired under plan can be acquired on an as-needed basis in the spot market. New York and Rotterdam have large and active spot markets where buyers acquire the marginal barrels they need and sellers offer their ex-

[15] National Petroleum Council, *Petroleum Inventories and Storage Capacity: A Report of the National Petroleum Council*, *op. cit.*, pp. 37-44. For study methodology, see Appendixes K and L.

cess barrels. Spot market prices reflect the prices of marginal barrels and, as such, quickly reflect changes in market conditions. Spot prices are sometimes above and sometimes below contract prices. Since June 1984, spot market prices have been below year-earlier prices.

A futures contract is a contract to provide a stated quantity of distillate fuel oil at a future specified date, location, and price. These contracts are bought and sold by traders on commodity exchanges, such as the New York Mercantile Exchange, on behalf of producers and purchasers who want to assure product supply at specified prices. The value of these contracts tends to converge to the spot market price as the specified time period approaches. New price series have developed to track the daily price changes of futures contracts on the various commodity exchanges.

Region. Distillate fuel oil prices are not the same in different regions of the country for several reasons. Some areas have less demand for the function the fuel serves; e.g., the South needs less space heating fuel than the North. Competition from other fuels affects price in some regions. Also, costs to transport the product to the region when local refinery production does not match demand contribute to regional price differences.

Season. Distillate fuel oil prices are greater during the winter than during the summer; cold weather strengthens the demand for heating oil.

Taxes. Distillate fuel oil used as a motor fuel is taxed by the Federal Government and State governments. The Federal diesel tax was increased to 15 cents per gallon on August 1, 1984. This was the second Federal increase in less than 2 years; it followed an increase from 4 cents per gallon to 9 cents per gallon on April 1, 1983. State diesel taxes range between 4 cents per gallon (New Jersey) and 18 cents per gallon (Minnesota and Washington). Most diesel taxes are fixed amounts, but some vary around a legislated amount depending on changes in price indices. In some States, the sales of diesel fuel oil and residential fuel oil are subject to general State sales taxes. Most price series are published excluding taxes.

Purchases by different sectors of the economy result from transactions which differ in all the ways discussed above. As a result, prices vary by sector and are highest for residential users and lowest for industrial users. Between 1973 and 1983, however, the relative price increase was greatest for the industrial sector and least for the commercial sector [16]

Prices for sales to several end-use sectors are presented in EIA's *Petroleum Marketing Monthly*. The price series for No. 2 fuel oil sold to residential consumers is probably the best known Prices for this series reached their 1983 high point in January at $1.15 and fell to $1.04 in April. Prices reached $1.07 by the last month of 1983, but rose to $1 12 in January 1984 and $1.17 in February 1984. As winter demand eased and supplies were replenished in the spring, prices declined. Prices in June 1984 were about 1 cent above the previous year. Prices during the coming winter will reflect the interactions of wintertime demand and supply.

In a short time frame, consumers can respond by changing usage rates and adding to or drawing from tertiary inventories. Although conversions to other fuels are made in response to relative price differences, they require capital conversions and are not made quickly. Because the rate of price increase for residential sector natural gas between 1973 and 1983 has been slightly less than the rate of increase for residential sector distillate fuel oil and the Btu value was greater for a dollar spent on natural gas, natural gas has increased its share of the residential heating market. Future relative price movements by natural gas and distillate fuel oil will affect the rate of conversions and, consequently, affect demand for distillate fuel oil. The relative price changes for diesel fuel oil, motor gasoline, and other transportation fuels will also affect distillate fuel oil demand.

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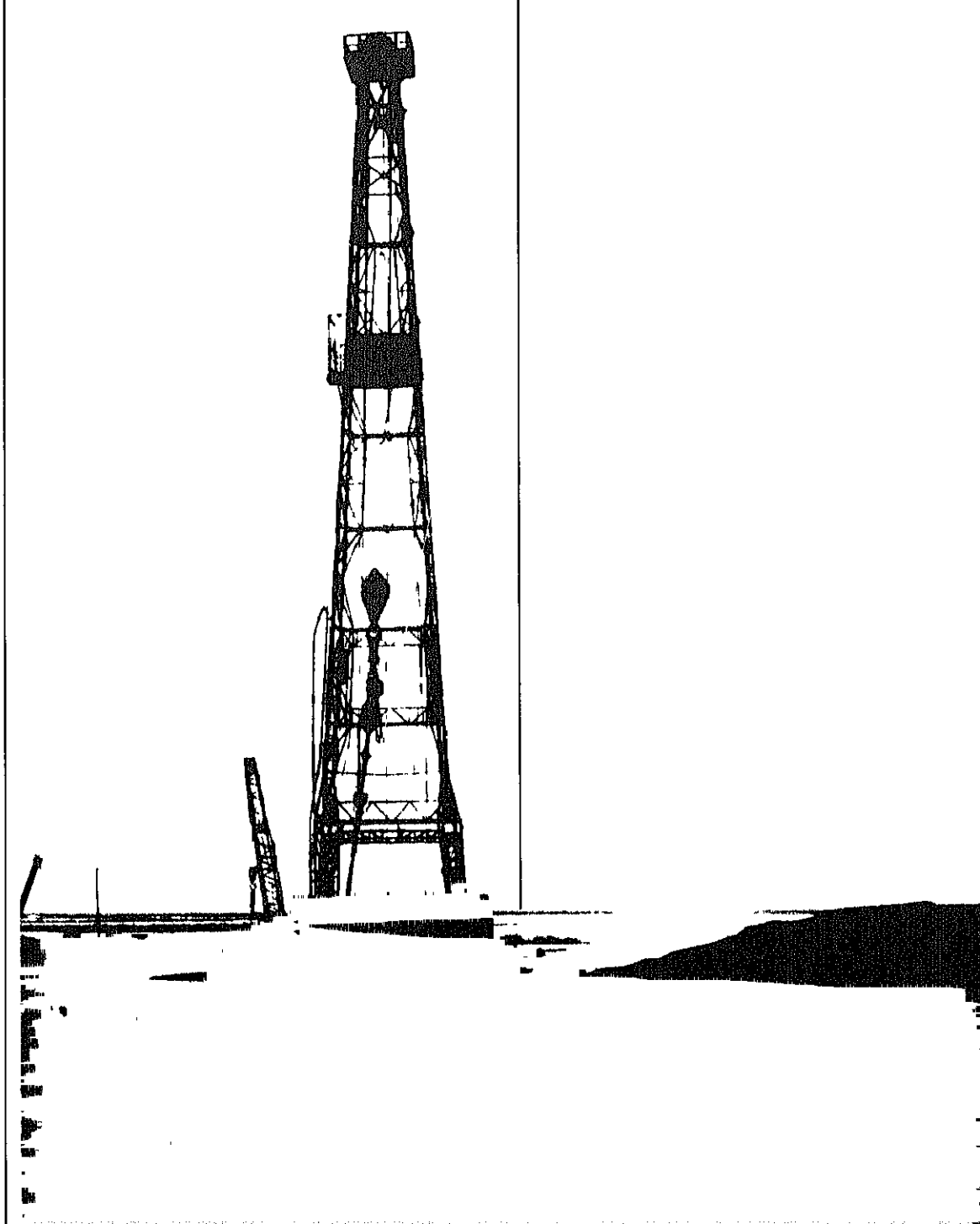
[16] Energy Information Administration, *Annual Energy Outlook 1983*, DOE/EIA-0383(83) (Washington, D.C., April 1984), pp. 193-194.



Crude Oil[1] and Petroleum Products Overview

| | Field Production | | | Stock Withdrawal[2] | | | End
Stock |
|---|---|---|---|---|---|---|---|
| | Total Domestic[4] | Crude Oil | Natural Gas Plant Production | Crude Oil[5] | Petroleum Products | Petroleum Products Supplied | Crud
Oil[5] a
Petrole
Produc |
	Thousand Barrels per Day						Million Ba
1973 AVERAGE	10,975	9,208	1,738	11	-146	17,308	1,00
1974 AVERAGE	10,498	8,774	1,688	-62	-117	16,653	r 1,07
1975 AVERAGE	10,045	8,375	1,633	[8] -17	[8] -145	16,322	1,13
1976 AVERAGE	9,774	8,132	1,603	-39	96	17,461	1,11
1977 AVERAGE	9,913	8,245	1,618	-170	-370	18,431	1,31
1978 AVERAGE	10,328	8,707	1,567	-78	172	18,847	1,27
1979 AVERAGE	10,179	8,552	1,584	-148	-25	18,513	1,34
1980 AVERAGE	10,214	8,597	1,573	-98	-42	17,056	r 1,39
1981 AVERAGE	10,230	8,572	1,609	[8] -290	[8] 130	16,058	1,48
1982 January	10,128	8,509	1,578	-401	1,298	16,124	1,45
February	10,312	8,702	1,563	-242	1,230	16,001	1,42
March	10,284	8,667	1,572	121	1,047	15,660	1,39
April	10,188	8,591	1,542	-37	1,583	16,040	1,34
May	10,244	8,683	1,518	29	-66	14,847	1,37
June	10,212	8,646	1,511	40	-489	14,998	1,33
July	10,229	8,658	1,513	-147	-926	14,821	1,48
August	10,215	8,634	1,524	-440	-44	14,889	1,42
September	10,279	8,701	1,518	263	-447	15,022	1,41
October	10,299	8,701	1,530	-548	-47	14,859	1,43
November	10,359	8,697	1,609	-398	-361	15,009	1,45
December	10,276	8,598	1,628	128	688	15,487	r 1,46
AVERAGE	**10,252**	**8,649**	**1,550**	**-136**	**283**	**15,296**	
1983 January	10,331	8,697	1,580	[8] -499	[8] 772	14,722	1,44
February	10,388	8,758	1,575	-320	1,113	14,792	1,48
March	10,279	8,700	1,541	83	1,810	15,541	1,37
April	10,322	8,776	1,506	-402	308	14,692	1,37
May	10,190	8,631	1,493	-15	-602	14,505	1,39
June	10,261	8,667	1,523	-122	-276	15,289	1,40
July	10,228	8,636	1,539	233	-909	15,019	1,45
August	10,284	8,679	1,562	-796	-271	15,480	1,46
September	10,447	8,784	1,602	-239	-621	15,506	1,45
October	10,434	8,771	1,604	-274	-442	14,962	1,50
November	10,461	8,770	1,641	114	-182	15,500	1,51
December	9,983	8,397	1,544	-329	2,133	16,726	1,48
AVERAGE	**10,299**	**8,688**	**1,559**	**-214**	**234**	**15,231**	
1984 January	10,282	8,659	1,585	-342	1,085	16,726	1,43
February	10,410	8,726	1,629	186	-1,353	15,389	1,46
March	10,354	8,718	1,588	-2	643	16,017	1,44
April	10,347	8,688	1,616	-565	-128	15,484	1,46
May	10,415	8,752	1,610	-616	-422	15,566	1,49
June	10,398	8,743	1,612	-95	-77	15,687	1,50
July*	10,487	8,769	1,649	R-184	R-184	R15,547	R1,51
August**	NA	8,781	NA	*127*	*-76*	*15,638*	*1,51*
AVERAGE	**NA**	**8,730**	**NA**	**-188**	**-53**	**15,761**	

[1] Includes lease condensate.
[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3] Stocks are totals as of end of period.
[4] Includes crude oil, natural gas plant production, other hydrocarbons, and alcohol.
[5] Includes stocks located in the Strategic Petroleum Reserve.
[6] Includes crude oil for storage in the Strategic Petroleum Reserve.
[7] Net Imports equal Imports minus Exports
[8] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations See Explanatory Note 10.

Footnotes continued on following page.

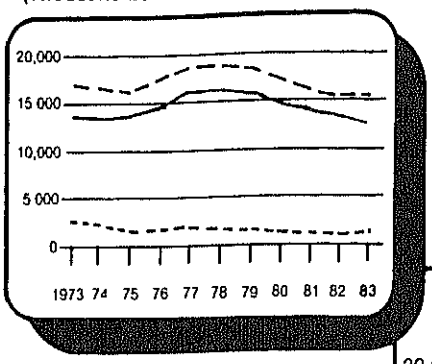
Crude Oil[1] and Petroleum Products Overview (continued)

	Imports			Exports			
	Total	Crude Oil[6]	Petroleum Products	Total	Crude Oil	Petroleum Products	Net[7] Imports
	Thousand Barrels per Day						
1973 AVERAGE	**6,256**	**3,244**	**3,012**	**231**	**2**	**229**	**6,025**
1974 AVERAGE	**6,112**	**3,477**	**2,635**	**221**	**3**	**218**	**5,892**
1975 AVERAGE	**6,056**	**4,105**	**1,951**	**209**	**6**	**204**	**5,846**
1976 AVERAGE	**7,313**	**5,287**	**2,026**	**223**	**8**	**215**	**7,090**
1977 AVERAGE	**8,807**	**6,615**	**2,193**	**243**	**50**	**193**	**8,565**
1978 AVERAGE	**8,363**	**6,356**	**2,008**	**362**	**158**	**204**	**8,002**
1979 AVERAGE	**8,456**	**6,519**	**1,937**	**472**	**235**	**237**	**7,984**
1980 AVERAGE	**6,909**	**5,263**	**1,646**	**544**	**287**	**258**	**6,365**
1981 AVERAGE	**5,996**	**4,396**	**1,599**	**595**	**228**	**367**	**5,401**
1982 January	5,332	3,693	1,639	829	238	591	4,503
February	4,807	2,990	1,817	804	304	499	4,003
March	4,484	2,874	1,610	882	321	561	3,602
April	4,378	2,849	1,529	786	174	611	3,593
May	4,811	3,309	1,503	803	262	542	4,008
June	5,327	3,836	1,491	703	94	609	4,624
July	5,890	4,248	1,642	741	229	512	5,149
August	5,244	3,851	1,392	858	304	554	4,386
September	5,414	3,636	1,778	791	184	606	4,624
October	5,306	3,670	1,636	932	270	662	4,374
November	5,744	3,862	1,882	786	262	524	4,958
December	4,606	3,000	1,605	860	193	667	3,746
AVERAGE	**5,113**	**3,488**	**1,625**	**815**	**236**	**579**	**4,298**
1983 January	4,438	2,964	1,474	973	117	856	3,464
February	3,726	2,267	1,459	865	262	603	2,861
March	3,690	2,290	1,400	801	174	627	2,889
April	4,727	3,118	1,609	809	88	721	3,918
May	5,089	3,360	1,729	848	280	568	4,241
June	5,326	3,577	1,749	774	144	630	4,552
July	5,741	3,871	1,870	571	145	426	5,170
August	6,159	4,227	1,933	663	172	491	5,496
September	6,129	4,210	1,919	684	177	507	5,445
October	5,258	3,446	1,812	576	140	436	4,682
November	5,210	3,337	1,873	679	186	494	4,531
December	5,033	3,213	1,820	639	95	544	4,394
AVERAGE	**5,051**	**3,329**	**1,722**	**739**	**164**	**575**	**4,312**
1984 January	5,347	3,029	2,318	575	153	422	4,772
February	5,643	2,952	2,691	582	185	397	5,061
March	5,253	3,455	1,798	840	236	605	4,413
April	5,319	3,417	1,902	655	172	483	4,664
May	5,916	3,927	1,989	766	219	548	5,150
June	5,304	3,410	1,893	864	222	642	4,440
July*	R 5,387	R 3,646	R 1,741	536	108	429	4,851
August**	*4,795*	*3,289*	*1,506*	NA	NA	NA	NA
AVERAGE	**5,369**	**3,394**	**1,975**	**NA**	**NA**	**NA**	**NA**

Footnotes continued.
* See Explanatory Note 9.1.
** Italics denote estimates based upon preliminary data. See Explanatory Note 8.
R = Revised data. NA = Not available.
Note: Geographic coverage is the 50 United States and the District of Columbia.
Total may not equal sum of components due to independent rounding.
Source: See the last page of this section.

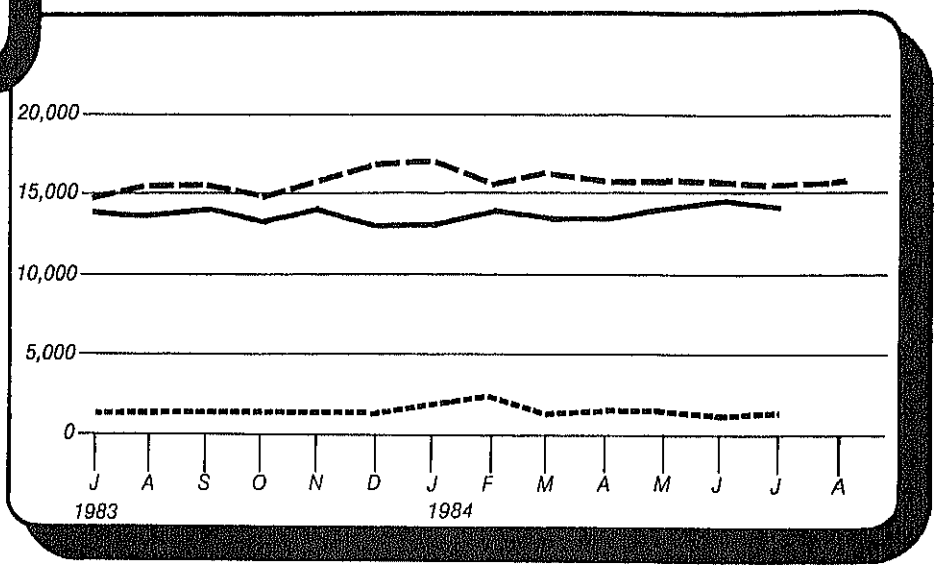
Petroleum Overview

(Thousand Barrels Per Day)



Annual

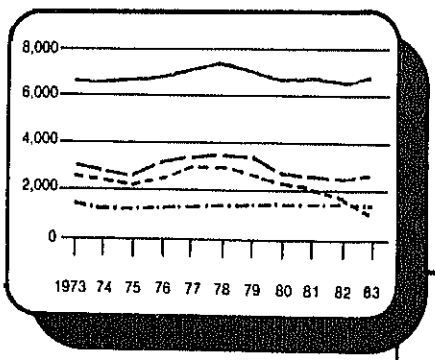
Legend
- Petroleum Product Supplied
- Refinery Production
- Net Petroleum Product Imports



Monthly

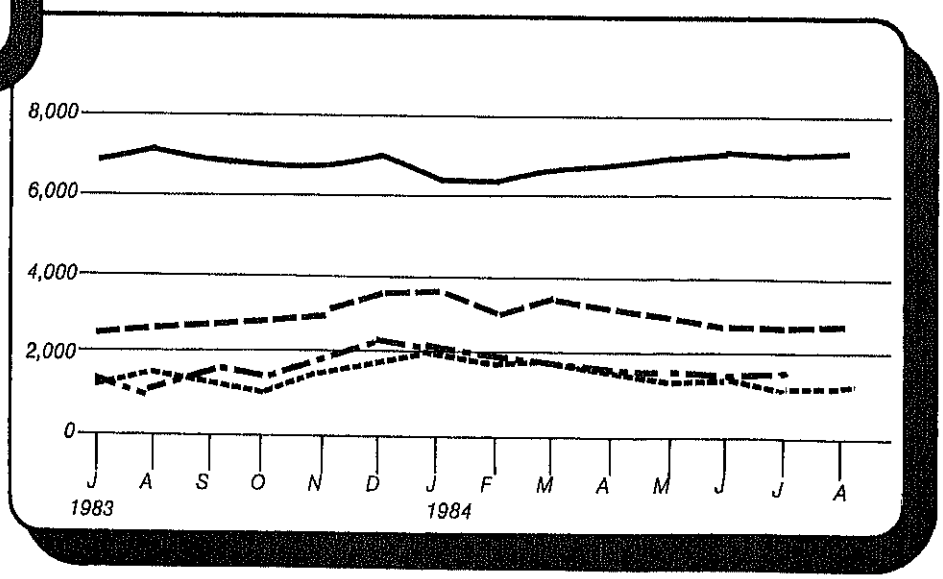
Petroleum Products Supplied

(Thousand Barrels Per Day)



Annual

Legend
- Motor Gasoline
- Distillate Fuel Oil
- Residual Fuel Oil
- LPG[1]

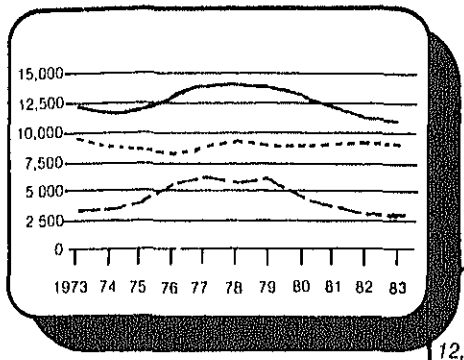


Monthly

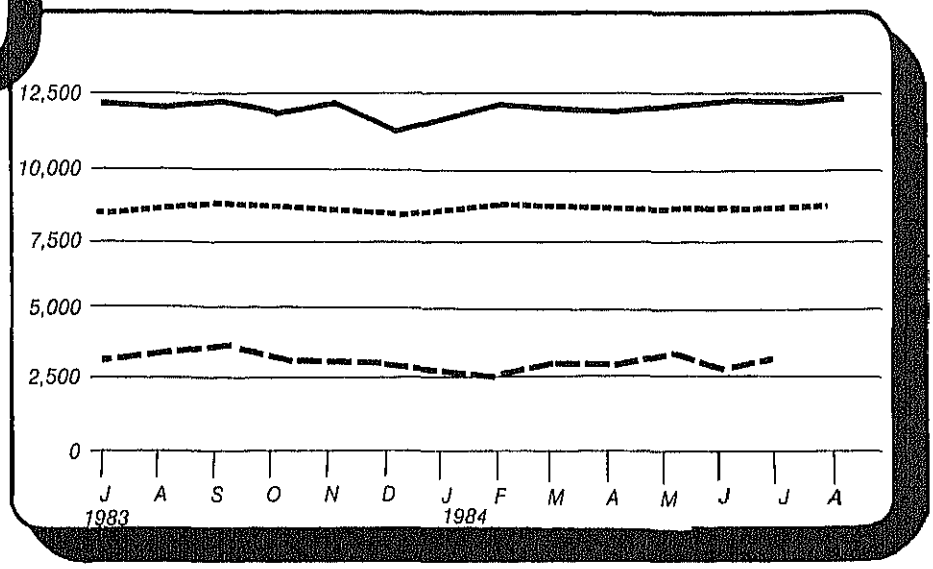
[1] Liquefied Petroleum Gases

Crude Oil Supply and Disposition

(Thousand Barrels Per Day)



Annual

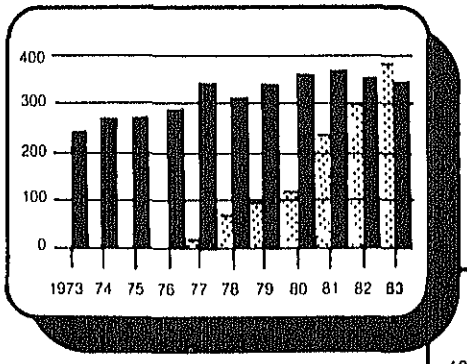


Monthly

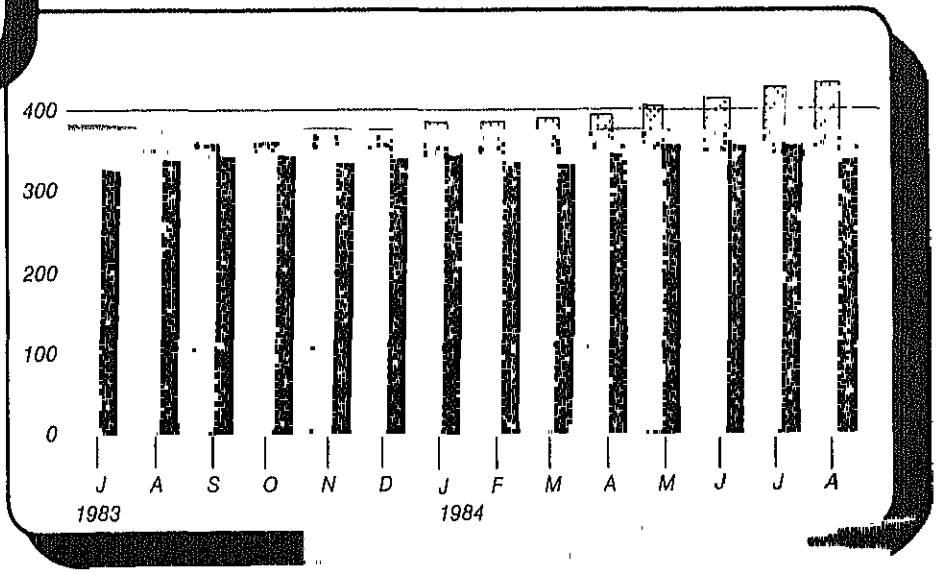
¹ Excludes SPR Imports

Crude Oil Ending Stocks

(Million Barrels)



Annual



Monthly

¹ Level and width of Average Stock Ranges for other primary crude oil is based on 3 years of data, Jan. 81-Dec. 83. See Explanatory Note 6.

Crude Oil[1] Supply and Disposition

	Supply							
	Field Production		Imports			Stock Withdrawal[3]		
	Total Domestic	Alaskan	Total	SPR[4]	Other	SPR[4]	Other	Unaccounted for Crude Oil
	Thousand Barrels per Day							
1973 AVERAGE	9,208	198	3,244		3,244		11	3
1974 AVERAGE	8,774	193	3,477		3,477		-62	-25
1975 AVERAGE	8,375	191	4,105		4,105		-17	17
1976 AVERAGE	8,132	173	5,287		5,287		-39	77
1977 AVERAGE	8,245	464	6,615	21	6,594	-20	-150	-6
1978 AVERAGE	8,707	1,229	6,356	162	6,195	-163	84	-57
1979 AVERAGE	8,552	1,401	6,519	67	6,452	-67	-81	-11
1980 AVERAGE	8,597	1,617	5,263	44	5,219	-45	-52	34
1981 AVERAGE	8,572	1,609	4,396	256	4,141	-336	[6] 46	83
1982 January	8,509	1,705	3,693	170	3,523	-159	-242	101
February	8,702	1,707	2,990	159	2,830	-213	-29	156
March	8,667	1,696	2,874	185	2,689	-235	357	2
April	8,591	1,691	2,849	190	2,659	-233	196	231
May	8,683	1,707	3,309	204	3,105	-176	205	111
June	8,646	1,665	3,836	105	3,732	-105	144	133
July	8,658	1,710	4,248	97	4,150	-97	-50	-20
August	8,634	1,697	3,851	208	3,643	-208	-232	189
September	8,701	1,705	3,636	139	3,497	-143	406	-210
October	8,701	1,706	3,670	216	3,454	-216	-332	249
November	8,697	1,676	3,862	180	3,683	-179	-219	-124
December	8,598	1,682	3,000	124	2,877	-125	252	35
AVERAGE	8,649	1,696	3,488	165	3,323	-174	38	71
1983 January	8,697	1,732	2,964	219	2,746	-219	[6] -280	170
February	8,758	1,717	2,267	197	2,070	-197	-123	262
March	8,700	1,732	2,290	201	2,089	-184	267	31
April	8,776	1,721	3,118	205	2,913	-197	-205	98
May	8,631	1,662	3,360	289	3,071	-293	278	169
June	8,667	1,687	3,577	190	3,387	-188	66	370
July	8,636	1,715	3,871	274	3,597	-264	497	-167
August	8,679	1,697	4,227	350	3,876	-358	-438	281
September	8,784	1,738	4,210	309	3,901	-307	68	-30
October	8,771	1,733	3,446	202	3,244	-201	-73	44
November	8,770	1,720	3,337	171	3,166	-135	250	34
December	8,397	1,711	3,213	193	3,020	-252	-78	117
AVERAGE	8,688	1,714	3,329	234	3,096	-234	20	114
1984 January	8,659	1,741	3,029	200	2,829	-173	-169	451
February	8,726	1,740	2,952	85	2,868	-96	282	487
March	8,718	1,740	3,455	148	3,307	-147	145	66
April	8,688	1,725	3,417	170	3,247	-170	-396	590
May	8,752	1,793	3,927	246	3,681	-245	-371	463
June	8,743	1,792	3,410	309	3,101	-309	214	490
July*	8,769	1,769	R 3,646	R 329	R3,317	R-328	R144	25
August**	8,781	1,725	*3,289*	*198*	*3,091*	*-215*	*342*	NA
AVERAGE	8,730	1,753	3,394	211	3,183	-211	23	NA

[1] Includes lease condensate.
[2] Stocks are totals as of end of period.
[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4] Strategic Petroleum Reserve.
[5] Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.
[6] Stocks of Alaskan crude oil in transit were included beginning in January 1981. Stock withdrawals are calculated using new basis stock levels. See Explanatory Notes 10 and 11.

Footnotes continued on following page.

Crude Oil[1] Supply and Disposition (continued)

	Supply	Disposition				Ending Stocks[2]		
	Crude Used Directly[5]	Crude Losses	Refinery Inputs	Exports	Products Supplied[5]	Total Crude Oil	SPR[4]	Other Primary
	Thousand Barrels per Day					Million Barrels		
1973 **AVERAGE**	-19	13	12,431	2	NA	242		242
1974 **AVERAGE**	-15	13	12,133	3	NA	265		265
1975 **AVERAGE**	-17	13	12,442	6	NA	271		271
1976 **AVERAGE**	-18	15	13,416	8	NA	285		285
1977 **AVERAGE**	-14	16	14,602	50	NA	348	7	340
1978 **AVERAGE**	-14	16	14,739	158	NA	376	67	309
1979 **AVERAGE**	-13	16	14,648	235	NA	430	91	339
1980 **AVERAGE**	-13	15	13,481	287	NA	[6] 466	108	[6] 358
1981 **AVERAGE**	-58	5	12,470	228	NA	594	230	363
1982 January	-63	3	11,599	238	NA	606	235	371
February	-64	2	11,236	304	NA	613	241	372
March	-63	5	11,276	321	NA	609	249	361
April	-65	3	11,392	174	NA	610	256	355
May	-62	3	11,806	262	NA	609	261	348
June	-60	7	12,494	94	NA	608	264	344
July	-60	3	12,446	229	NA	613	267	346
August	-57	2	11,871	304	NA	626	274	353
September	-56	4	12,146	184	NA	619	278	341
October	-51	2	11,749	270	NA	636	285	351
November	-51	1	11,724	262	NA	648	290	358
December	-53	1	11,514	193	NA	[6] 644	294	[6] 350
AVERAGE	**-59**	**3**	**11,774**	**236**	**NA**			
1983 January	NA	2	11,143	117	71	660	301	360
February	NA	3	10,633	262	71	669	306	363
March	NA	2	10,859	174	70	667	312	355
April	NA	2	11,433	88	68	679	318	361
May	NA	1	11,800	280	63	679	327	353
June	NA	(S)	12,284	144	64	683	332	351
July	NA	2	12,360	145	65	676	341	335
August	NA	1	12,152	172	64	700	352	349
September	NA	1	12,482	177	66	708	361	347
October	NA	1	11,782	140	63	716	367	349
November	NA	2	12,004	186	64	713	371	341
December	NA	1	11,234	95	67	723	379	344
AVERAGE	**NA**	**2**	**11,685**	**164**	**66**			
1984 January	NA	1	11,579	153	64	733	384	348
February	NA	1	12,100	185	65	727	387	340
March	NA	2	11,936	236	62	728	392	336
April	NA	(S)	11,893	172	64	744	397	348
May	NA	2	12,243	219	62	764	404	359
June	NA	2	12,263	222	61	766	414	353
July*	NA	1	R12,087	108	60	R 772	R424	R348
August**	NA	NA	*12,488*	NA	NA	*772*	*429*	*343*
AVERAGE	**NA**	**NA**	**12,073**	**NA**	**NA**			

Footnotes continued.
* See Explanatory Note 9.2.
** Italics denote estimates based upon preliminary data. See Explanatory Note 8.
R = Revised data. NA = Not available.
Note: Geographic coverage is the 50 United States and the District of Columbia.
Total may not equal sum of components due to independent rounding
Source: See the last page of this section.

Crude Oil and Petroleum Product Imports

	Imports from OPEC Sources[1]										
	Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC[2]	Total OPEC	Total Arab OPEC[3]
	Thousand Barrels per Day										
1973 AVERAGE	**136**	**164**	**486**	**71**	**213**	**223**	**459**	**1,135**	**106**	**2,993**	**915**
1974 AVERAGE	**190**	**4**	**461**	**74**	**300**	**469**	**713**	**979**	**88**	**3,280**	**752**
1975 AVERAGE	**282**	**232**	**715**	**117**	**390**	**280**	**762**	**702**	**122**	**3,601**	**1,383**
1976 AVERAGE	**432**	**453**	**1,230**	**254**	**539**	**298**	**1,025**	**700**	**134**	**5,066**	**2,424**
1977 AVERAGE	**559**	**723**	**1,380**	**335**	**541**	**535**	**1,143**	**690**	**287**	**6,193**	**3,185**
1978 AVERAGE	**649**	**654**	**1,144**	**385**	**573**	**555**	**919**	**645**	**226**	**5,751**	**2,963**
1979 AVERAGE	**636**	**658**	**1,356**	**281**	**420**	**304**	**1,080**	**690**	**212**	**5,637**	**3,056**
1980 AVERAGE	**488**	**554**	**1,261**	**172**	**348**	**9**	**857**	**481**	**130**	**4,300**	**2,551**
1981 AVERAGE	**311**	**319**	**1,129**	**81**	**366**	**0**	**620**	**406**	**90**	**3,323**	**1,848**
1982 January	254	161	877	111	289	0	663	376	128	2,859	1,403
February	139	92	693	89	244	0	584	355	102	2,297	1,054
March	91	37	555	155	200	0	522	399	91	2,051	860
April	85	0	511	122	215	0	427	426	85	1,871	740
May	179	0	601	116	236	0	222	422	54	1,830	897
June	115	0	593	94	215	72	537	361	110	2,096	820
July	159	0	660	108	327	69	910	356	95	2,685	965
August	181	0	489	133	271	27	574	299	133	2,107	818
September	179	0	432	57	191	21	477	518	69	1,943	677
October	249	7	494	61	242	108	313	504	106	2,084	810
November	247	14	489	47	283	34	479	528	115	2,235	797
December	155	0	237	12	265	88	462	399	73	1,690	421
AVERAGE	**170**	**26**	**552**	**92**	**248**	**35**	**514**	**412**	**97**	**2,146**	**854**
1983 January	207	0	282	47	255	43	186	337	54	1,412	537
February	115	0	214	9	217	0	92	393	28	1,068	338
March	63	0	103	0	138	0	121	440	201	1,066	183
April	227	0	162	(s)	210	0	186	523	125	1,432	389
May	286	0	122	12	405	37	385	455	69	1,771	420
June	300	0	188	40	466	38	467	335	138	1,973	528
July	283	0	182	64	464	112	525	434	187	2,251	606
August	378	0	448	52	433	213	464	511	230	2,728	903
September	423	0	587	21	501	86	324	432	221	2,595	1,084
October	261	0	638	16	368	12	307	337	169	2,108	938
November	184	0	545	56	302	21	215	452	135	1,910	807
December	144	0	569	45	294	9	329	415	163	1,969	826
AVERAGE	**240**	**0**	**337**	**30**	**338**	**48**	**302**	**422**	**144**	**1,862**	**632**
1984 January	242	0	463	114	278	0	243	547	51	1,939	828
February	348	0	324	33	267	0	244	481	174	1,871	723
March	283	0	307	112	284	67	260	354	127	1,792	717
April	280	0	320	95	221	0	288	581	158	1,944	734
May	456	0	329	240	480	0	289	621	242	2,657	1,131
June	284	0	411	46	415	0	243	574	139	2,112	806
July	332	0	429	112	384	0	204	535	242	2,237	946
AVERAGE	**318**	**0**	**370**	**109**	**333**	**10**	**253**	**528**	**162**	**2,081**	**843**

[1] Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries

[2] Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

[3] Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar

Footnotes continued on following page

Crude Oil and Petroleum Product Imports (continued)

	Imports from Non-OPEC Sources [4]										
	Baha-mas	Canada	Mexico	Nether-lands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico	Virgin Islands	Other Non OPEC	Total Non OPEC	Total Imports
	Thousand Barrels per Day										
1973 AVERAGE	174	1,325	16	585	255	15	99	329	465	3,263	6,256
1974 AVERAGE	164	1,070	8	511	251	8	90	391	340	2,832	6,112
1975 AVERAGE	152	846	71	332	242	14	90	406	300	2,454	6,056
1976 AVERAGE	118	599	87	275	274	31	88	422	353	2,247	7,313
1977 AVERAGE	171	517	179	211	289	126	105	466	550	2,614	8,807
1978 AVERAGE	160	467	318	229	253	180	94	429	484	2,613	8,363
1979 AVERAGE	147	538	439	231	190	202	92	431	548	2,819	8,456
1980 AVERAGE	78	455	533	225	176	176	88	388	491	2,609	6,909
1981 AVERAGE	74	447	522	197	133	375	62	327	534	2,672	5,996
1982 January	58	513	425	179	106	346	62	334	452	2,474	5,332
February	67	537	476	221	120	181	38	362	508	2,510	4,807
March	43	437	503	189	118	294	62	307	480	2,433	4,484
April	82	360	476	184	166	247	36	266	690	2,507	4,378
May	77	419	766	152	95	516	47	302	607	2,981	4,811
June	32	481	797	148	129	557	58	322	708	3,231	5,327
July	64	536	783	158	118	433	38	376	698	3,204	5,890
August	80	443	853	145	106	520	24	317	650	3,137	5,244
September	92	493	897	195	89	631	51	278	746	3,472	5,414
October	45	459	682	148	109	666	52	262	801	3,222	5,306
November	51	553	860	212	90	623	81	334	706	3,508	5,744
December	88	561	689	174	102	438	48	336	480	2,916	4,606
AVERAGE	**65**	**482**	**685**	**175**	**112**	**456**	**50**	**316**	**627**	**2,968**	**5,113**
1983 January	68	534	849	228	73	314	40	299	621	3,026	4,438
February	92	586	722	183	81	193	50	192	558	2,658	3,726
March	86	488	775	187	78	240	43	162	565	2,624	3,690
April	174	454	981	216	85	421	20	183	759	3,295	4,727
May	135	518	944	153	108	484	42	235	699	3,318	5,089
June	137	586	830	173	120	440	48	262	757	3,353	5,326
July	69	634	849	198	107	369	37	364	864	3,490	5,741
August	144	542	906	197	90	461	40	313	738	3,431	6,159
September	148	533	849	261	82	475	33	307	845	3,534	6,129
October	171	532	771	172	106	414	48	357	580	3,151	5,258
November	148	556	726	144	110	334	55	427	801	3,300	5,210
December	127	604	710	153	113	429	22	278	628	3,063	5,033
AVERAGE	**125**	**547**	**826**	**189**	**96**	**382**	**40**	**282**	**701**	**3,189**	**5,051**
1984 January	152	624	705	277	54	382	53	390	772	3,408	5,347
February	142	620	747	288	77	338	58	418	1,083	3,772	5,643
March	88	726	707	169	93	400	34	247	996	3,460	5,253
April	88	691	859	207	91	282	37	257	863	3,375	5,319
May	31	715	675	192	57	418	38	336	796	3,259	5,916
June	50	499	732	234	104	318	53	268	934	3,192	5,304
July	14	574	738	99	120	362	27	292	924	3,150	5,387
AVERAGE	**80**	**636**	**737**	**209**	**85**	**358**	**43**	**315**	**908**	**3,371**	**5,452**

Footnotes continued.

[4] Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries

(s) = Less than 500 barrels per day.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

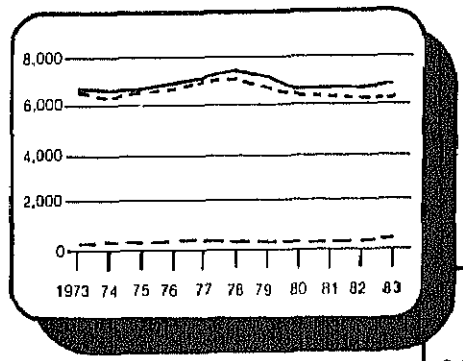
Total may not equal sum of components due to independent rounding.

Geographic coverage: The 50 United States and the District of Columbia.

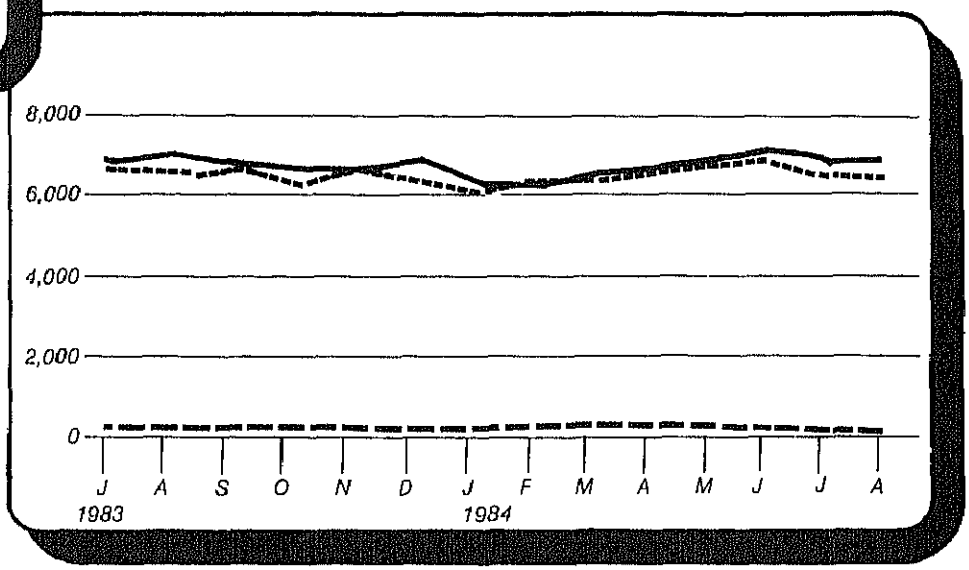
Source: See the last page of this section.

Motor Gasoline Supply and Disposition

(Thousand Barrels Per Day)



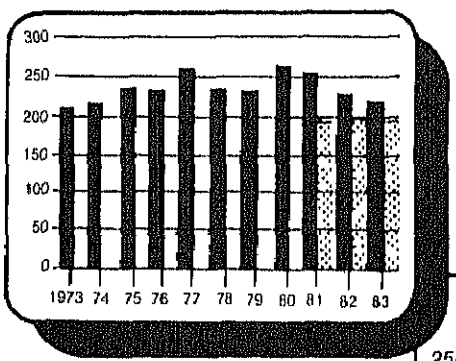
Annual



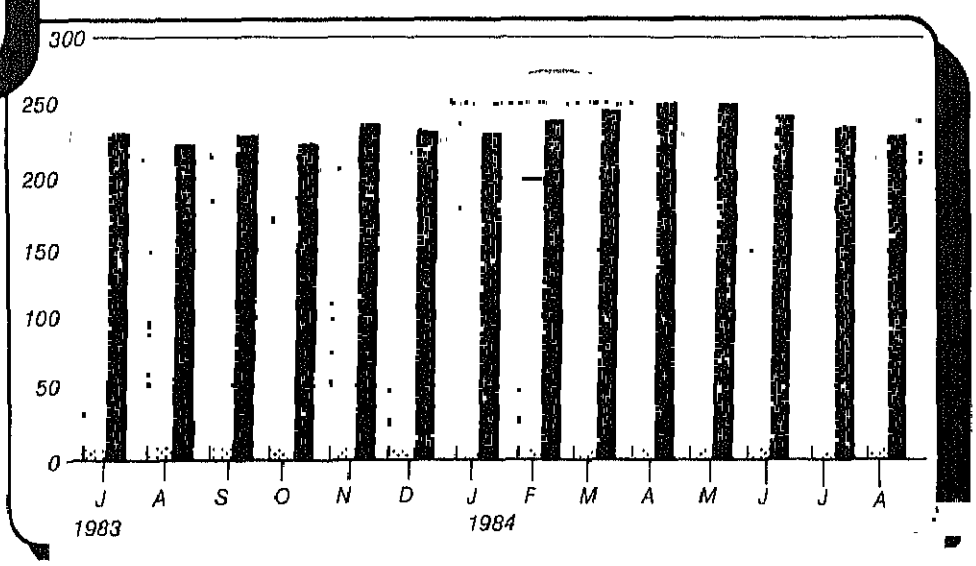
Monthly

Motor Gasoline Ending Stocks

(Million Barrels)



Annual



Monthly

[1] Includes motor gasoline blending components and finished motor gasoline.
[2] Level and width of Average Stock Range for total motor gasoline based on 3 years of data Jan. 81-Dec. 83. See Explanatory Note 6.

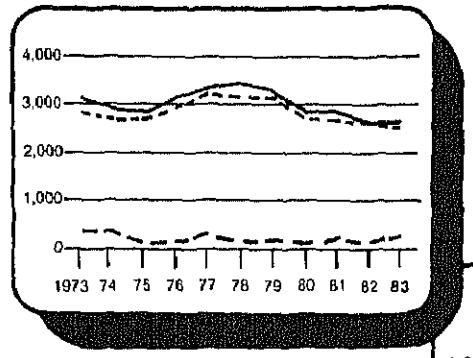
Finished Motor Gasoline Supply and Disposition

	Supply			Disposition				Ending Stocks[1]	
	Total Production	Imports[2]	Stock Withdrawal[2,3]	Exports	Products Supplied: Total	Products Supplied: Unleaded[4]	Products Supplied: Unleaded	Total Motor Gasoline[5]	Finished Motor Gasoline
	Thousand Barrels per Day						Percent of Total	Million Barrels	
1973 AVERAGE	6,535	134	9	4	6,674	NA	NA	209	
1974 AVERAGE	6,360	204	-24	2	6,537	NA	NA	[6] 218	
1975 AVERAGE	6,520	184	[6] -28	2	6,675	NA	NA	235	
1976 AVERAGE	6,841	131	10	3	6,978	NA	NA	231	
1977 AVERAGE	7,033	217	-72	2	7,177	1,976	27.5	258	
1978 AVERAGE	7,169	190	54	1	7,412	2,521	34.0	238	
1979 AVERAGE	6,852	181	2	(s)	7,034	2,798	39.8	237	
1980 AVERAGE	6,506	140	-66	1	6,579	3,067	46.6	[6] 261	
1981 AVERAGE[7]	6,405	157	[6] 28	2	6,588	3,264	49.5	253	
1982 January	6,167	128	-316	18	5,961	3,067	51.5	261	213
February	5,899	133	172	8	6,196	3,210	51 8	257	208
March	5,994	183	334	44	6,466	3,358	51.9	247	198
April	6,095	185	650	33	6,897	3,495	50.7	221	179
May	6,319	182	177	23	6,655	3,415	51 3	214	173
June	6,754	230	-134	14	6,835	3,565	52 2	219	177
July	6,768	225	-178	24	6,790	3,577	52.7	226	183
August	6,419	291	-81	16	6,614	3,526	53.3	227	185
September	6,527	223	-198	22	6,531	3,404	52 1	234	191
October	6,262	185	-42	15	6,391	3,351	52.4	234	192
November	6,273	211	101	11	6,574	3,451	52.5	230	189
December	6,542	178	-165	7	6,549	3,485	53 2	[6] 235	[6] 194
AVERAGE	**6,338**	**197**	**25**	**20**	**6,539**	**3,409**	**52.1**		
1983 January	6,065	153	[6] -167	(s)	6,051	3,364	55 6	250	207
February	5,848	128	24	(s)	6,000	3,264	54 4	250	207
March	5,906	186	768	23	6,836	3,622	53 0	223	183
April	6,201	255	-3	1	6,452	3,492	54 1	221	183
May	6,397	305	-83	1	6,617	3,558	53.8	223	185
June	6,655	277	84	22	6,994	3,792	54.2	223	183
July	6,707	302	-225	18	6,765	3,746	55.4	231	190
August	6,537	250	161	13	6,936	3,836	55 3	226	185
September	6,611	279	-149	14	6,727	3,691	54.9	229	189
October	6,188	330	72	2	6,588	3,711	56.3	227	187
November	6,634	269	-298	2	6,603	3,692	55.9	236	196
December	6,308	224	339	25	6,846	3,966	57.9	222	186
AVERAGE	**6,340**	**247**	**45**	**10**	**6,622**	**3,647**	**55.1**		
1984 January	6,037	233	-1	1	6,268	3,606	57.5	225	186
February	6,320	303	-384	2	6,237	3,585	57.5	237	197
March	6,375	343	-197	9	6,512	3,747	57.5	243	203
April	6,528	308	-153	(s)	6,682	3,854	57.7	248	207
May	6,650	329	-106	(s)	6,873	3,990	58 1	253	211
June	6,620	272	217	17	7,092	4,210	59.4	245	204
July*	R 6,481	R 247	R 130	9	R 6,849	4,094	59.8	R 239	R 200
August**	*6,493*	*198*	*250*	NA	6,949	NA	NA	*228*	*190*
AVERAGE	**6,438**	**279**	**-28**	**NA**	**6,685**	**NA**	**NA**		

[1] Stocks are totals as of end of period.
[2] Beginning in 1981, excludes blending components.
[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4] Includes gasohol.
[5] Includes motor gasoline blending components.
[6] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.
[7] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.
* See Explanatory Note 9.3.
** Italics denote estimates based upon preliminary data. See Explanatory Note 8.
R = Revised data. NA = Not available. (s) = Less than 500 barrels per day.
Note: Geographic coverage is the 50 United States and the District of Columbia.
Total may not equal sum of components due to independent rounding.
Source: See the last page of this section.

Distillate Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)



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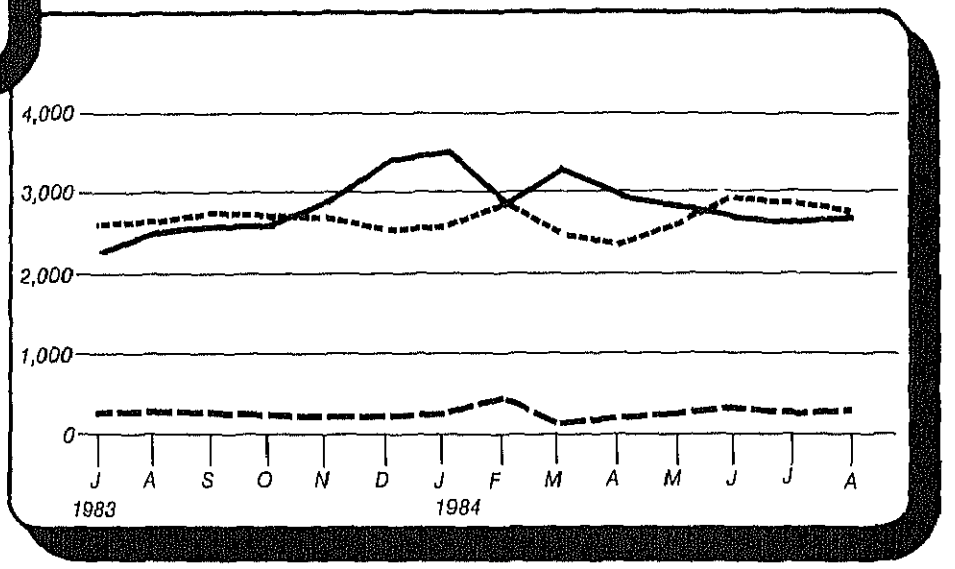
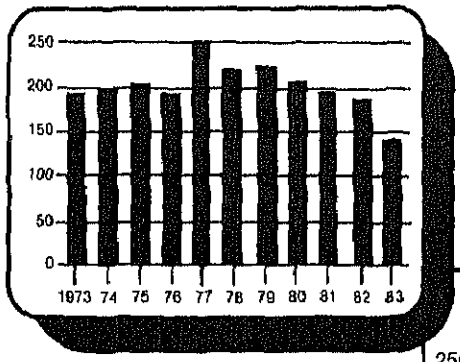


Monthly

Distillate Fuel Oil Ending Stocks

(Million Barrels)



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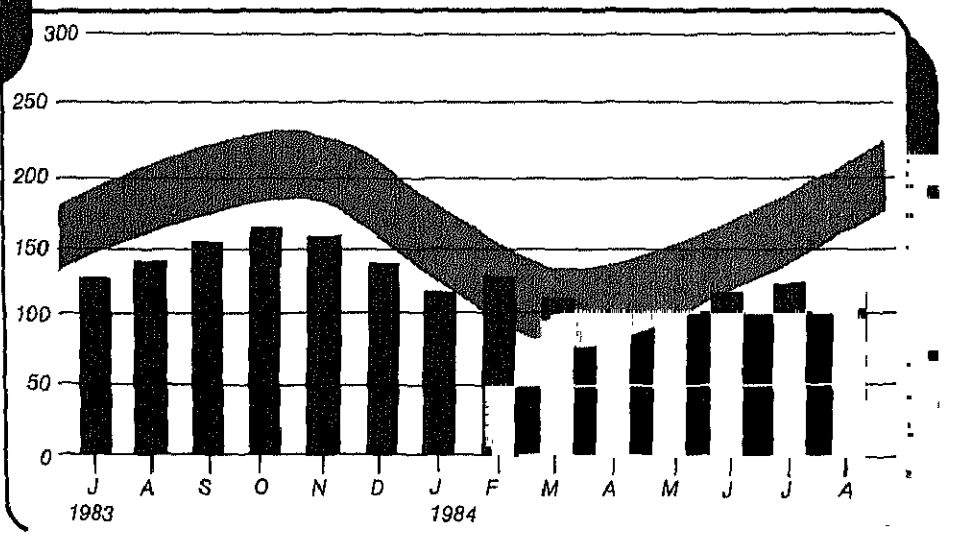


Monthly

¹ Level and width of Average Stock Range for distillate fuel oil is based on 3 years of data, Jan. 81-Dec. 83. See Explanatory Note 6.

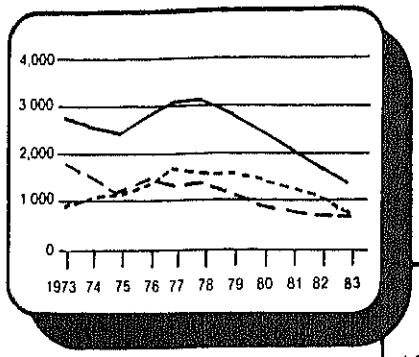
Distillate Fuel Oil Supply and Disposition

	Supply				Disposition		Ending Stocks[1]
	Total Production	Imports	Stock Withdrawal[2]	Crude Used Directly[3]	Exports	Products Supplied[3]	
	Thousand Barrels per Day						Million Barrels
1973 AVERAGE	**2,822**	**392**	**-115**	**2**	**9**	**3,092**	**196**
1974 AVERAGE	**2,669**	**289**	**-9**	**2**	**2**	**2,948**	**[4] 200**
1975 AVERAGE	**2,654**	**155**	**[4] 40**	**2**	**1**	**2,851**	**209**
1976 AVERAGE	**2,924**	**146**	**62**	**1**	**1**	**3,133**	**186**
1977 AVERAGE	**3,278**	**250**	**-176**	**1**	**1**	**3,352**	**250**
1978 AVERAGE	**3,167**	**173**	**93**	**1**	**3**	**3,432**	**216**
1979 AVERAGE	**3,153**	**193**	**-34**	**1**	**3**	**3,311**	**229**
1980 AVERAGE	**2,662**	**142**	**64**	**1**	**3**	**2,866**	**[4] 205**
1981 AVERAGE[5]	**2,613**	**173**	**[4] 38**	**10**	**5**	**2,829**	**192**
1982 January	2,591	97	876	10	90	3,484	164
February	2,427	132	605	11	90	3,085	147
March	2,288	48	682	10	84	2,945	126
April	2,358	59	612	13	64	2,978	108
May	2,618	74	-183	10	75	2,444	114
June	2,729	102	-335	10	55	2,452	124
July	2,734	125	-789	11	24	2,058	148
August	2,507	80	-339	10	40	2,218	159
September	2,657	61	-85	12	139	2,507	161
October	2,838	91	-289	8	66	2,581	170
November	2,860	145	-514	8	24	2,475	186
December	2,655	109	225	10	143	2,855	[4] 179
AVERAGE	**2,606**	**93**	**35**	**10**	**74**	**2,671**	
1983 January	2,321	68	[4] 580	NA	173	2,797	168
February	2,135	59	691	NA	105	2,780	148
March	1,993	42	971	NA	59	2,947	118
April	2,171	73	500	NA	47	2,697	103
May	2,444	147	-186	NA	50	2,354	109
June	2,546	179	-161	NA	40	2,524	114
July	2,604	267	-546	NA	55	2,270	131
August	2,615	301	-379	NA	43	2,495	142
September	2,739	259	-386	NA	37	2,575	154
October	2,681	260	-276	NA	55	2,611	163
November	2,680	203	45	NA	54	2,874	161
December	2,522	221	676	NA	54	3,365	140
AVERAGE	**2,456**	**174**	**124**	**NA**	**64**	**2,690**	
1984 January	2,585	270	676	NA	40	3,490	119
February	2,864	458	-439	NA	41	2,842	132
March	2,480	115	727	NA	66	3,256	110
April	2,347	220	393	NA	32	2,929	98
May	2,633	252	-10	NA	48	2,827	98
June	2,879	266	-490	NA	53	2,602	113
July*	R 2,736	R198	R-375	NA	40	R2,518	125
August**	*2,719*	*268*	*-345*	NA	NA	2,580	*136*
AVERAGE	**2,654**	**254**	**21**	**NA**	**NA**	**2,882**	

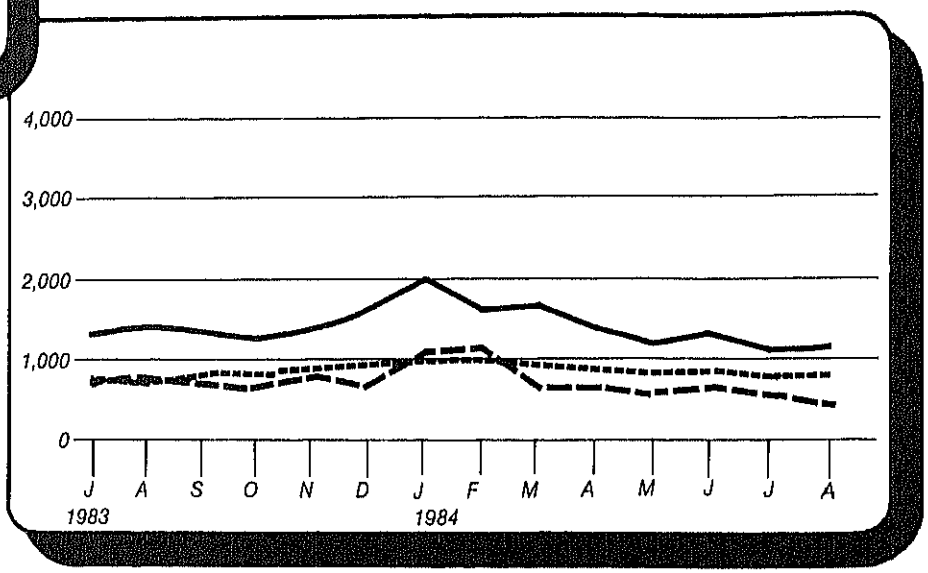
[1] Stocks are totals as of end of period.
[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3] Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.
[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.
[5] Beginning in January 1981, survey forms were modified See Explanatory Note 12.
* See Explanatory Note 9 4
** Italics denote estimates based upon preliminary data. See Explanatory Note 8.
R = Revised data. NA = Not available (s) = Less than 500 barrels per day.
Note: Geographic coverage is the 50 United States and the District of Columbia.
Total may not equal sum of components due to independent rounding.
Source: See the last page of this section

Residual Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)



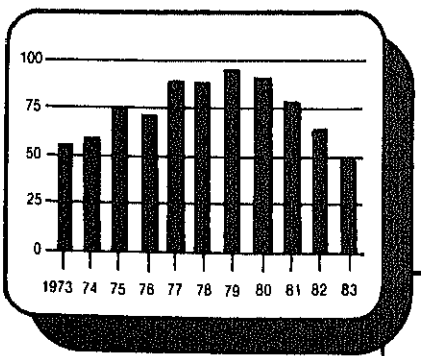
Annual



Monthly

Residual Fuel Oil Ending Stocks

(Million Barrels)



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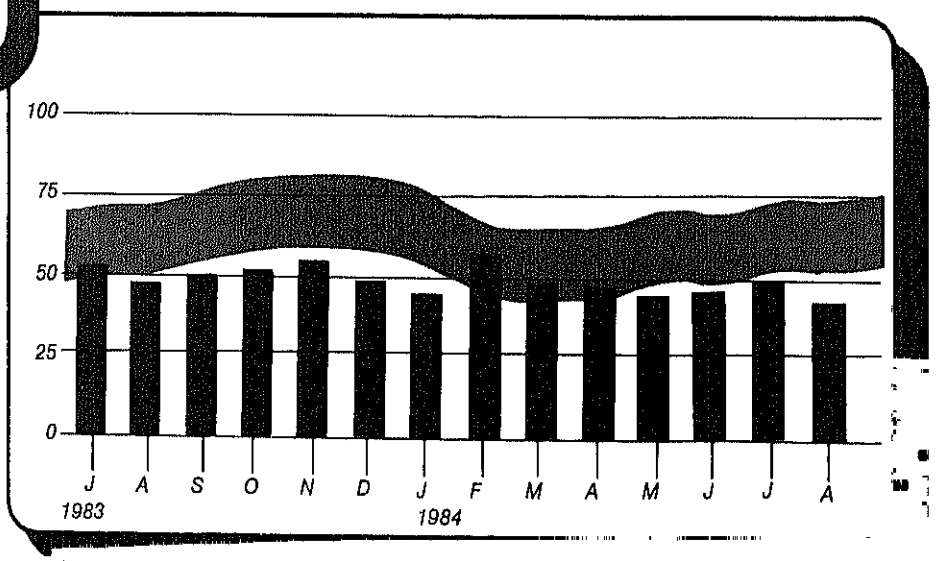


Monthly

[1] Level and width of Average Stock Range for residual fuel oil based on 3 years of data. Jan. 81-Dec. 83. See Explanatory Note 6.

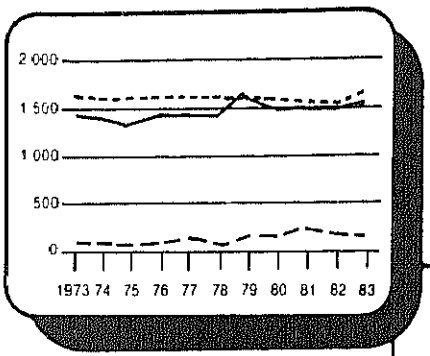
Residual Fuel Oil Supply and Disposition

	Supply				Disposition		Ending Stocks[1]
	Total Production	Imports	Stock Withdrawal[2]	Crude Used Directly[3]	Exports	Products Supplied[3]	
	Thousand Barrels per Day						Million Barrels
1973 AVERAGE	**971**	**1,853**	**5**	**17**	**23**	**2,822**	**53**
1974 AVERAGE	**1,070**	**1,587**	**-17**	**13**	**14**	**2,639**	**[4] 60**
1975 AVERAGE	**1,235**	**1,223**	**[4] 2**	**15**	**15**	**2,462**	**74**
1976 AVERAGE	**1,377**	**1,413**	**5**	**17**	**12**	**2,801**	**72**
1977 AVERAGE	**1,754**	**1,359**	**-48**	**13**	**6**	**3,071**	**90**
1978 AVERAGE	**1,667**	**1,355**	**-1**	**13**	**13**	**3,023**	**90**
1979 AVERAGE	**1,687**	**1,151**	**-15**	**12**	**9**	**2,826**	**96**
1980 AVERAGE	**1,580**	**939**	**10**	**12**	**33**	**2,508**	**[4] 92**
1981 AVERAGE[5]	**1,321**	**800**	**[4] 37**	**48**	**118**	**2,088**	**78**
1982 January	1,235	831	301	53	235	2,185	69
February	1,186	956	363	53	213	2,344	58
March	1,123	912	12	53	197	1,903	58
April	1,166	788	150	52	234	1,923	54
May	1,128	742	-172	52	191	1,560	59
June	1,074	652	-57	50	217	1,501	61
July	1,028	657	56	49	239	1,550	59
August	965	551	203	47	235	1,531	53
September	1,008	872	-306	44	148	1,470	62
October	955	783	-57	43	234	1,490	64
November	989	837	-94	43	182	1,591	66
December	989	747	6	43	186	1,598	[4] 66
AVERAGE	**1,070**	**776**	**32**	**48**	**209**	**1,716**	
1983 January	972	691	[4] 258	NA	294	1,626	61
February	857	647	257	NA	191	1,570	53
March	835	686	227	NA	169	1,579	46
April	941	753	-10	NA	310	1,374	47
May	936	738	-141	NA	190	1,342	51
June	828	677	36	NA	218	1,323	50
July	769	684	-64	NA	90	1,299	52
August	710	739	115	NA	165	1,400	48
September	826	706	-47	NA	134	1,351	50
October	807	638	-50	NA	153	1,243	51
November	845	780	-97	NA	167	1,362	54
December	897	649	182	NA	141	1,587	49
AVERAGE	**852**	**699**	**55**	**NA**	**185**	**1,421**	
1984 January	953	1,061	119	NA	151	1,981	45
February	1,003	1,107	-420	NA	87	1,602	58
March	887	633	321	NA	204	1,637	48
April	840	637	9	NA	130	1,357	47
May	829	554	35	NA	200	1,218	46
June	841	676	-17	NA	176	1,324	47
July*	R 792	R 596	R-77	NA	99	R1,213	R 49
August**	*802*	*458*	*121*	NA	NA	1,202	*43*
AVERAGE	**867**	**712**	**15**	**NA**	**NA**	**1,441**	

[1] Stocks are totals as of end of period.
[2] A negative number indicates an increase in stocks and a positive number indicates a decrease
[3] Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.
[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.
[5] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.
* See Explanatory Note 9.4.
** Italics denote estimates based upon preliminary data. See Explanatory Note 8.
R = Revised data. NA = Not available. (s) = Less than 500 barrels per day.
Note: Geographic coverage is the 50 United States and the District of Columbia.
Total may not equal sum of components due to independent rounding.
Source: See the last page of this section.

Liquefied Petroleum Gases Supply and Disposition

(Thousand Barrels Per Day)



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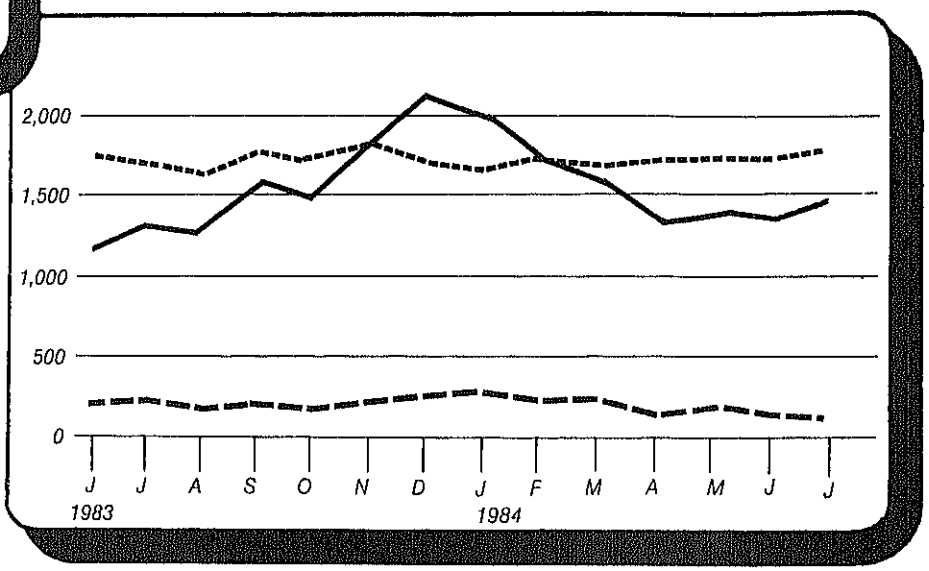
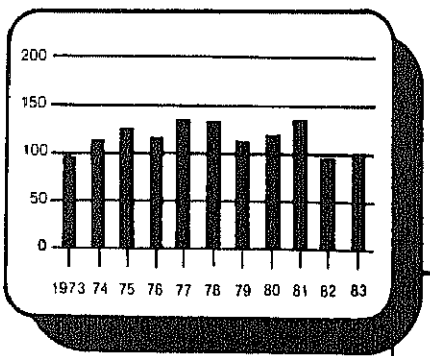


Monthly

Liquefied Petroleum Gases Ending Stocks

(Million Barrels)



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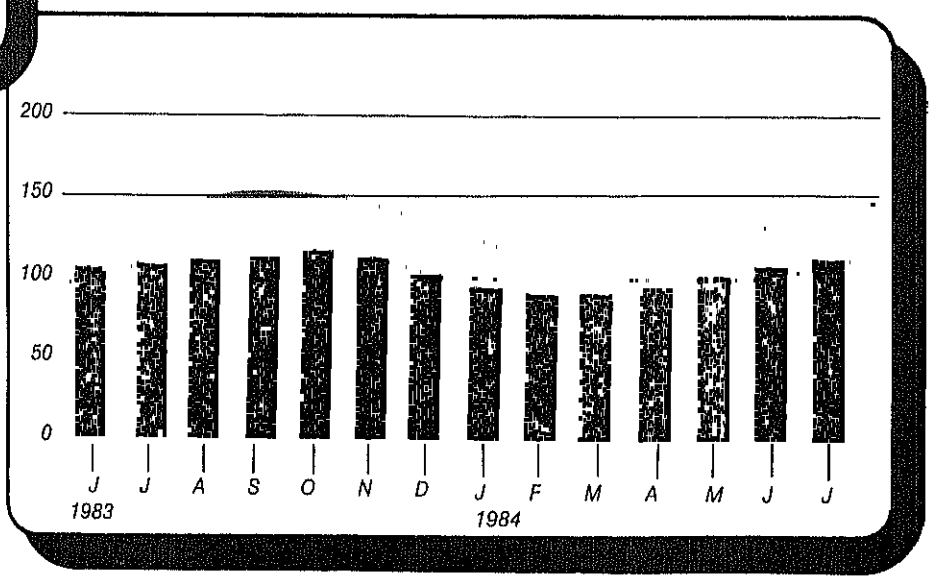


Monthly

[1] Level and width of Average Stock range for liquefied petroleum gases based on 3 years of data, Jan. 81-Dec 83. See Explanatory Note 6.

Liquefied Petroleum Gases[1] Supply and Disposition

	Supply			Disposition			Ending Stocks[2]
	Total Production	Imports	Stock Withdrawal[3]	Refinery Inputs	Exports	Products Supplied	
	Thousand Barrels per Day						Million Barrels
1973 AVERAGE	**1,600**	**132**	**-35**	**220**	**27**	**1,449**	**99**
1974 AVERAGE	**1,565**	**123**	**-38**	**220**	**25**	**1,406**	**[4] 113**
1975 AVERAGE	**1,527**	**112**	**[4] -35**	**246**	**26**	**1,333**	**125**
1976 AVERAGE	**1,535**	**130**	**24**	**260**	**25**	**1,404**	**116**
1977 AVERAGE	**1,566**	**161**	**-55**	**233**	**18**	**1,422**	**136**
1978 AVERAGE	**1,537**	**123**	**12**	**239**	**20**	**1,413**	**132**
1979 AVERAGE	**1,556**	**217**	**70**	**236**	**15**	**1,592**	**111**
1980 AVERAGE	**1,535**	**216**	**-27**	**233**	**21**	**1,469**	**[4] 120**
1981 AVERAGE	**1,571**	**244**	**[4] -18**	**289**	**42**	**1,466**	**135**
1982 January	1,565	314	443	391	67	1,863	121
February	1,466	291	243	327	51	1,621	114
March	1,544	223	211	289	74	1,615	108
April	1,506	188	98	257	77	1,458	105
May	1,565	186	-71	234	43	1,403	107
June	1,515	192	-86	262	106	1,254	109
July	1,476	227	-13	253	37	1,399	110
August	1,511	125	-45	254	61	1,276	111
September	1,538	247	37	274	85	1,463	110
October	1,517	194	97	306	81	1,421	107
November	1,542	267	175	363	37	1,583	102
December	1,580	258	256	395	56	1,642	[4] 94
AVERAGE	**1,528**	**226**	**111**	**300**	**65**	**1,499**	
1983 January	1,611	240	[4] 520	313	118	1,939	86
February	1,600	305	128	244	76	1,713	82
March	1,543	166	-9	197	127	1,377	82
April	1,607	124	-156	198	116	1,260	87
May	1,613	167	-225	207	84	1,263	94
June	1,664	172	-334	203	59	1,241	104
July	1,656	191	-221	217	55	1,354	111
August	1,586	160	-199	229	29	1,289	117
September	1,705	178	-30	236	86	1,531	118
October	1,688	160	-81	268	32	1,467	120
November	1,785	180	70	362	33	1,640	118
December	1,645	247	575	363	66	2,038	[4] 101
AVERAGE	**1,642**	**190**	**4**	**253**	**73**	**1,509**	
1984 January	1,610	269	[4] 470	333	23	1,993	93
February	1,690	237	146	323	41	1,708	89
March	1,685	241	12	289	68	1,581	89
April	1,711	155	-170	253	54	1,389	94
May	1,709	211	-221	244	42	1,412	101
June	1,714	158	-189	237	53	1,394	106
July*	1,750	132	-138	232	43	1,469	111
AVERAGE	**1,695**	**200**	**-13**	**273**	**46**	**1,564**	

[1] Includes ethane, propane, normal butane, and isobutane.
Beginning in January 1984, unfractionated stream is reported by individual product.
[2] Stocks are totals as of end of period.
[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4] In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.
* See Explanatory Note 9.5.
Note: Geographic coverage is the 50 United States and the District of Columbia.
Total may not equal sum of components due to independent rounding.
Source: See the last page of this section.

Other Petroleum Products[1] Supply and Disposition

	Supply			Disposition			Ending Stocks[2]
	Total Production	Imports	Stock Withdrawal[3]	Refinery Inputs	Exports	Products Supplied	
	Thousand Barrels per Day						Million Barrels
1973 AVERAGE	**3,693**	**502**	**-9**	**750**	**166**	**3,270**	**208**
1974 AVERAGE	**3,558**	**432**	**-28**	**665**	**174**	**3,123**	**[4] 218**
1975 AVERAGE	**3,424**	**277**	**[4] -2**	**537**	**160**	**3,002**	**219**
1976 AVERAGE	**3,643**	**206**	**-5**	**524**	**175**	**3,145**	**220**
1977 AVERAGE	**3,912**	**205**	**-27**	**514**	**165**	**3,410**	**230**
1978 AVERAGE	**4,046**	**166**	**14**	**492**	**167**	**3,568**	**225**
1979 AVERAGE	**4,153**	**195**	**-37**	**352**	**209**	**3,749**	**238**
1980 AVERAGE	**3,956**	**210**	**-23**	**311**	**198**	**3,634**	**[4] 247**
1981 AVERAGE	**3,739**	**226**	**[4] 46**	**723**	**199**	**3,088**	**282**
1982 January	3,171	269	-7	624	180	2,631	282
February	3,403	305	-153	663	138	2,755	287
March	3,466	243	-191	725	161	2,631	293
April	3,408	309	73	796	204	2,790	290
May	3,317	318	184	824	210	2,785	285
June	3,547	315	123	812	216	2,954	281
July	3,660	408	-1	856	187	3,023	281
August	3,583	346	217	743	202	3,201	274
September	3,533	375	105	749	213	3,051	271
October	3,529	383	244	915	266	2,976	264
November	3,498	423	-28	837	269	2,786	264
December	3,324	313	366	885	275	2,842	[4] 253
AVERAGE	**3,453**	**334**	**80**	**787**	**211**	**2,869**	
1983 January	3,194	322	[4] -419	588	271	2,239	271
February	3,229	321	12	673	232	2,658	270
March	3,381	319	-147	572	249	2,732	275
April	3,299	404	-24	592	247	2,840	276
May	3,405	374	35	705	242	2,866	275
June	3,610	444	96	717	292	3,144	272
July	3,636	425	148	735	209	3,265	267
August	3,695	482	30	668	242	3,297	266
September	3,792	497	-6	788	236	3,255	266
October	3,578	424	-107	711	195	2,990	270
November	3,568	441	95	912	238	2,957	267
December	3,123	479	361	883	257	2,823	[4] 256
AVERAGE	**3,460**	**411**	**6**	**712**	**242**	**2,923**	
1984 January	3,391	486	[4] -177	561	207	2,931	253
February	3,582	586	-256	751	225	2,935	261
March	3,510	466	-218	530	258	2,969	268
April	3,584	582	-207	627	268	3,063	274
May	3,683	642	-118	775	257	3,175	277
June	3,863	521	404	1,229	343	3,213	265
July*	3,866	567	278	1,034	238	3,438	257
AVERAGE	**3,639**	**550**	**-42**	**786**	**256**	**3,105**	

[1] Includes pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.
[2] Stocks are totals as of end of period.
[3] A negative number indicates an increase in stocks and a positive number indicates a decrease
[4] In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.
* See Explanatory Note 9.6.
Note: Geographic coverage is the 50 United States and the District of Columbia
Total may not equal sum of components due to independent rounding.
Source: See the last page of this section.

Sources

1 1973 through 1976: U.S. Department of the Interior, Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual.*

2. 1977 through 1980: Energy Information Administration (EIA), *Energy Data Reports, Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual,* and unleaded gasoline data from *Monthly Petroleum Statistics Report.*

3. January 1981 through December 1983: EIA, *Petroleum Supply Annual.*

4. January 1984 through July 1984: Detailed statistics in appropriate issues of the *Petroleum Supply Monthly.* (See Explanatory Notes 9.1 through 9.6).

5. August 1984: Estimates based on EIA weekly data (except domestic crude oil production) (see Explanatory Note 1.1).

6. January 1984 through August 1984: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey. (See Explanatory Note 3).

Detailed Statistics

Table 1. U.S. Petroleum Balance, July 1984

	Current Month		Year-to date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Crude Oil (Including Lease Condensate)				
Field Production				
(1) Alaska	E 54,836	1,769	E 374,294	1,757
(2) Lower 48 States	E 217,007	7,000	E 1,483,497	6,965
(3) Total U.S.	E 271,843	8,769	E 1,857,791	8,722
Net Imports				
(4) Imports (Gross Excluding SPR)	102,840	3,317	680,790	3,196
(5) SPR Imports	10,197	329	45,405	213
(6) Exports	3,341	108	39,333	185
(7) Imports (Net Including SPR)	109,697	3,539	686,862	3,225
Other Sources				
(8) SPR Withdrawal (+) or Addition (-)	-10,169	-328	-44,815	-210
(9) Other Stock Withdrawal (+) or Addition (-)	4,466	144	-5,050	-24
(10) Product Supplied and Losses	-1,904	-61	-13,634	-64
(11) Unaccounted for [1]	762	25	77,640	365
(12) Total Other Sources	-6,845	-221	14,141	66
(13) Crude Input to Refineries	374,695	12,087	2,558,794	12,013
(13) = (3) + (7) + (12)				
Natural Gas Plant Liquids (NGPL)				
(14) Field Production	51,129	1,649	343,510	1,613
(15) Net Imports [2]	908	29	7,951	37
(16) Stock Withdrawal (+) or Addition (-) [2]	-448	-14	-2,204	-10
(17) Total NGPL Supply	51,589	1,664	349,257	1,640
Other Liquids				
Unfinished Oils and Gasoline Blending Components, Total				
(18) Stock Withdrawal (+) or Addition (-)	7,730	249	18	0
(19) Imports	9,044	292	67,293	316
(20) Other Hydrocarbons and Alcohol New Supply (Field Production)	2,128	69	10,598	50
(21) Refinery Processing Gain [1]	17,155	553	117,560	552
(22) Crude Oil Product Supplied	1,863	60	13,331	63
(23) Total Other Liquids	37,920	1,223	208,800	980
(23) = (18) through (22)				
(24) Total Production of Products [3]	464,204	14,974	3,116,851	14,633
(24) = (13) + (17) + (23)				
Net Imports of Refined Products [3]				
(25) Imports (Gross)	43,939	1,417	359,309	1,687
(26) Exports	13,205	426	106,800	501
(27) Imports (Net)	30,734	991	252,509	1,185
(28) Total New Supply of Products	494,938	15,966	3,369,360	15,819
(28) = (24) + (27)				
(29) Refined Products Stock Withdrawal (+) or Addition (-) [3]	-12,973	-418	-8,418	-40
(30) Total Petroleum Products Supplied for Domestic Use	481,965	15,547	3,360,942	15,779
(30) = (28) + (29)				
(31) Finished Motor Gasoline	212,330	6,849	1,415,637	6,646
(32) Distillate Fuel Oil	78,066	2,518	623,184	2,926
(33) Residual Fuel Oil	37,592	1,213	314,370	1,476
(34) Liquefied Petroleum Gases	45,530	1,469	333,108	1,564
(35) Other [4]	106,584	3,438	661,311	3,105
(36) Crude Oil	1,863	60	13,331	63
(37) Total Product Supplied	481,965	15,547	3,360,942	15,779
(37) = (31) through (36)				
Ending Stocks, All Oils				
(38) Crude Oil and Lease Condensate (Excluding SPR)	348,226	--	348,226	--
(39) Strategic Petroleum Reserve (SPR)	423,904	--	423,904	--
(40) Unfinished Oils	105,982	--	105,982	--
(41) Gasoline Blending Components [5]	39,020	--	39,020	--
(42) Pentanes Plus	10,969	--	10,969	--
(43) Finished Refined Products [3]	585,468	--	585,468	--
(44) Total Stocks	1,513,569	--	1,513,569	--

1 A balancing item.
2 Includes products in the pentanes plus category only.
3 For products included see Explanatory Note 9.7.
4 Includes pentanes plus, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.
5 Includes other hydrocarbons and alcohol.
E = Estimated.
-- Not Applicable.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1, 2 and 9.7.

Table 2. Supply and Disposition of Crude Oil and Petroleum Products, July 1984
(Thousand Barrels)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (–) or Addition (-)	Unaccounted For Crude Oil[1]	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 271,843	0	113,038	-5,703	762	41	374,695	3,341	1,863	772,130
Natural Gas Liquids and LRGs	51,023	12,562	5,067	-4,741	0	0	13,463	1,406	49,042	121,470
Pentanes Plus	9,335	0	987	-448	0	0	6,282	80	3,513	10,969
Liquefied Petroleum Gases	41,688	12,562	4,080	-4,293	0	0	7,181	1,326	45,530	110,501
Ethane	16,056	794	1,944	531	0	0	58	160	19,107	20,671
Propane	16,071	8,944	1,021	-3,741	0	0	105	855	21,335	59,067
Normal Butane	6,515	2,837	671	-1,511	0	0	3,195	232	5,085	21,214
Isobutane	3,046	-13	443	428	0	0	3,823	80	2	9,549
Other Liquids	2,128	0	9,044	7,730	0	0	25,785	0	-6,883	145,002
Other Hydrocarbons and Alcohol	2,128	0	0	-28	0	0	2,100	0	0	358
Unfinished Oils	0	0	6,926	4,799	0	0	18,230	0	-6,505	105,982
Motor Gasoline Blending Components	0	0	2,112	2,922	0	0	5,418	0	-384	38,372
Aviation Gasoline Blending Components	0	0	6	37	0	0	37	0	6	290
Finished Petroleum Products	106	418,536	39,860	-8,680	0	0	0	11,879	437,943	474,967
Finished Motor Gasoline	3	200,901	7,671	4,035	0	0	0	281	212,330	200,138
Finished Leaded Motor Gasoline	3	79,850	2,107	3,746	0	0	0	281	85,425	92,930
Finished Unleaded Motor Gasoline	0	121,051	5,564	289	0	0	0	0	126,904	107,208
Finished Aviation Gasoline	0	908	188	-153	0	0	0	0	943	2,511
Naphtha-Type Jet Fuel	0	7,148	0	48	0	0	0	0	7,196	6,858
Kerosene-Type Jet Fuel	0	29,654	1,059	-703	0	0	0	306	29,704	36,703
Kerosene	2	2,629	267	-141	0	0	0	2	2,755	8,028
Distillate Fuel Oil	39	84,767	6,145	-11,639	0	0	0	1,245	78,066	124,507
Residual Fuel Oil	0	24,561	18,486	-2,394	0	0	0	3,060	37,592	49,205
Naphtha < 400 Deg. for Petro. Feed Use	0	3,593	1,269	101	0	0	0	140	4,823	1,841
Other Oils > 400 Deg for Petro Feed Use	0	7,938	0	359	0	0	0	323	7,974	1,603
Special Naphthas	0	1,742	4,046	134	0	0	0	43	5,879	2,889
Lubricants	0	5,251	225	-682	0	0	0	431	4,363	11,740
Waxes	0	424	34	19	0	0	0	48	430	574
Petroleum Coke	0	13,258	0	-345	0	0	0	5,905	7,008	4,903
Asphalt and Road Oil	0	16,486	455	2,500	0	0	0	48	19,394	21,401
Still Gas	0	17,742	0	0	0	0	0	0	17,742	0
Miscellaneous Products	62	1,534	14	181	0	0	0	48	1,743	2,066
Total	325,100	431,098	167,009	-11,394	762	41	413,943	16,626	481,965	1,513,569

[1] Unaccounted for crude oil is a balancing item.
(s) = Less than 500 barrels.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January - July 1984
(Thousand Barrels)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 1,857,791	0	726,195	-49,865	77,640	303	2,558,794	39,333	13,331	772,130
Natural Gas Liquids and LRGs	342,304	80,073	51,227	-4,948	0	0	99,872	10,422	358,363	121,470
Pentanes Plus	61,255	0	8,524	-2,204	0	0	41,748	573	25,254	10,969
Liquefied Petroleum Gases	281,049	80,073	42,703	-2,744	0	0	58,124	9,849	333,108	110,501
Ethane	107,044	4,967	17,982	708	0	0	447	1,146	129,108	20,671
Propane	110,317	59,504	13,066	-3,787	0	0	832	5,731	172,537	59,067
Normal Butane	42,954	15,726	7,051	-825	0	0	31,793	2,400	30,713	21,214
Isobutane	20,734	-124	4,605	1,160	0	0	25,052	573	750	9,549
Other Liquids	10,598	0	67,293	18	0	0	125,621	0	-47,712	145,002
Other Hydrocarbons and Alcohol	10,598	0	0	-73	0	0	10,525	0	0	358
Unfinished Oils	0	0	51,979	1,516	0	0	90,923	0	-37,428	105,982
Motor Gasoline Blending Components	0	0	15,308	-1,452	0	0	24,146	0	-10,290	38,372
Aviation Gasoline Blending Components	0	0	6	27	0	0	27	0	6	290
Finished Petroleum Products	1,206	2,821,774	316,606	-5,674	0	0	0	96,951	3,036,961	474,967
Finished Motor Gasoline	496	1,369,057	61,899	-14,643	0	0	0	1,171	1,415,637	200,138
Finished Leaded Motor Gasoline	328	562,013	28,879	1,154	0	0	0	1,171	591,203	92,930
Finished Unleaded Motor Gasoline	168	807,044	33,020	-15,797	0	0	0	0	824,435	107,208
Finished Aviation Gasoline	0	5,305	467	-220	0	0	0	0	5,552	2,511
Naphtha-Type Jet Fuel	0	43,554	3,536	-645	0	0	0	175	46,270	6,858
Kerosene-Type Jet Fuel	0	191,936	9,898	-4,335	0	0	0	1,075	196,424	36,703
Kerosene	8	22,700	1,725	-168	0	0	0	19	24,246	8,028
Distillate Fuel Oil	277	563,014	53,776	15,895	0	0	0	9,778	623,184	124,507
Residual Fuel Oil	0	186,780	159,661	-97	0	0	0	31,973	314,370	49,205
Naphtha < 400 Deg. for Petro. Feed. Use	0	28,200	6,349	-129	0	0	0	1,432	32,988	1,841
Other Oils > 400 Deg. for Petro Feed. Use	0	57,267	0	154	0	0	0	3,345	54,076	1,603
Special Naphthas	-50	11,874	13,447	264	0	0	0	589	24,946	2,889
Lubricants	0	34,253	2,147	335	0	0	0	3,523	33,212	11,740
Waxes	0	3,046	294	209	0	0	0	278	3,265	574
Petroleum Coke	0	95,152	0	578	0	0	0	43,266	52,464	4,903
Asphalt and Road Oil	0	75,874	705	-2,609	0	0	0	98	73,872	21,401
Still Gas	0	120,651	0	0	0	0	0	0	120,651	0
Miscellaneous Products	475	13,111	2,703	-257	0	0	0	229	15,804	2,066
Total	2,211,899	2,901,847	1,161,321	-60,469	77,640	303	2,784,287	146,706	3,360,942	1,513,569

[1] Unaccounted for crude oil is a balancing item.
(s) = Less than 500 barrels.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, July 1984
(Thousand Barrels per Day)

Commodity	Supply					Disposition			
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,769	0	3,646	-184	25	1	12,087	108	60
Natural Gas Liquids and LRGs	1,646	405	163	-153	0	0	434	45	1,582
Pentanes Plus	301	0	32	-14	0	0	203	3	113
Liquefied Petroleum Gases	1,345	405	132	-138	0	0	232	43	1,469
Ethane	518	26	63	17	0	0	2	5	616
Propane	518	289	33	-121	0	0	3	28	688
Normal Butane	210	92	22	-49	0	0	103	7	164
Isobutane	98	(s)	14	14	0	0	123	3	(s)
Other Liquids	69	0	292	249	0	0	832	0	-222
Other Hydrocarbons and Alcohol	69	0	0	-1	0	0	68	0	0
Unfinished Oils	0	0	223	155	0	0	588	0	-210
Motor Gasoline Blending Components	0	0	68	94	0	0	175	0	-12
Aviation Gasoline Blending Components	0	0	(s)	1	0	0	1	0	(s)
Finished Petroleum Products	3	13,501	1,286	-280	0	0	0	383	14,127
Finished Motor Gasoline	(s)	6,481	247	130	0	0	0	9	6,849
Finished Leaded Motor Gasoline	(s)	2,576	68	121	0	0	0	9	2,756
Finished Unleaded Motor Gasoline	0	3,905	179	9	0	0	0	0	4,094
Finished Aviation Gasoline	0	29	6	-5	0	0	0	0	30
Naphtha-Type Jet Fuel	0	231	0	2	0	0	0	0	232
Kerosene-Type Jet Fuel	0	957	34	-23	0	0	0	10	958
Kerosene	(s)	85	9	-5	0	0	0	(s)	89
Distillate Fuel Oil	1	2,734	198	-375	0	0	0	40	2,518
Residual Fuel Oil	0	792	596	-77	0	0	0	99	1,213
Naphtha < 400 Deg for Petro. Feed. Use	0	116	41	3	0	0	0	5	156
Other Oils > 400 Deg. for Petro. Feed. Use	0	256	0	12	0	0	0	10	257
Special Naphthas	0	56	131	4	0	0	0	1	190
Lubricants	0	169	7	-22	0	0	0	14	141
Waxes	0	14	1	1	0	0	0	2	14
Petroleum Coke	0	428	0	-11	0	0	0	190	226
Asphalt and Road Oil	0	532	15	81	0	0	0	2	626
Still Gas	0	572	0	0	0	0	0	0	572
Miscellaneous Products	2	49	(s)	6	0	0	0	2	56
Total	10,487	13,906	5,387	-368	25	1	13,353	536	15,547

[1] Unaccounted for crude oil is a balancing item
(s) = Less than 500 barrels
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation

Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January - July 1984
(Thousand Barrels per Day)

Commodity	Supply					Disposition			
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,722	0	3,409	-234	365	1	12,013	185	63
Natural Gas Liquids and LRGs	1,607	376	241	-23	0	0	469	49	1,682
Pentanes Plus	288	0	40	-10	0	0	196	3	119
Liquefied Petroleum Gases	1,319	376	200	-13	0	0	273	46	1,564
Ethane	503	23	84	3	0	0	2	5	606
Propane	518	279	61	-18	0	0	4	27	810
Normal Butane	202	74	33	-4	0	0	149	11	144
Isobutane	97	-1	22	5	0	0	118	3	4
Other Liquids	50	0	316	(s)	0	0	590	0	-224
Other Hydrocarbons and Alcohol	50	0	0	(s)	0	0	49	0	0
Unfinished Oils	0	0	244	7	0	0	427	0	-176
Motor Gasoline Blending Components	0	0	72	-7	0	0	113	0	-48
Aviation Gasoline Blending Components	0	0	(s)	(s)	0	0	(s)	0	(s)
Finished Petroleum Products	6	13,248	1,486	-27	0	0	0	455	14,258
Finished Motor Gasoline	2	6,427	291	-69	0	0	0	5	6,646
Finished Leaded Motor Gasoline	2	2,639	136	5	0	0	0	5	2,776
Finished Unleaded Motor Gasoline	1	3,789	155	-74	0	0	0	0	3,871
Finished Aviation Gasoline	0	25	2	-1	0	0	0	0	26
Naphtha-Type Jet Fuel	0	204	17	-3	0	0	0	1	217
Kerosene-Type Jet Fuel	0	901	46	-20	0	0	0	5	922
Kerosene	(s)	107	8	-1	0	0	0	(s)	114
Distillate Fuel Oil	1	2,643	252	75	0	0	0	46	2,926
Residual Fuel Oil	0	877	750	(s)	0	0	0	150	1,476
Naphtha < 400 Deg. for Petro Feed. Use	0	132	30	-1	0	0	0	7	155
Other Oils > 400 Deg. for Petro Feed. Use	0	269	0	1	0	0	0	16	254
Special Naphthas	(s)	56	63	1	0	0	0	3	117
Lubricants	0	161	10	2	0	0	0	17	156
Waxes	0	14	1	1	0	0	0	1	15
Petroleum Coke	0	447	0	3	0	0	0	203	246
Asphalt and Road Oil	0	356	3	-12	0	0	0	(s)	347
Still Gas	0	566	0	0	0	0	0	0	566
Miscellaneous Products	2	62	13	-1	0	0	0	1	74
Total	10,385	13,624	5,452	-284	365	1	13,072	689	15,779

1 Unaccounted for crude oil is a balancing item.
(s) = Less than 500 barrels.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, July 1984
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 1,851	0	33,500	-714	-1,375	2,621	0	35,883	0	0	15,769
Natural Gas Liquids and LRGs	679	1,386	1,276	-755	0	1,933	0	210	67	4,242	4,114
Liquefied Petroleum Gases	607	1,386	400	-769	0	1,933	0	172	67	3,318	4,073
Pentanes Plus	72	0	876	14	0	0	0	38	0	924	41
Other Liquids	31	0	2,382	1,712	0	655	0	5,735	0	-955	18,888
Other Hydrocarbons and Alcohol	31	0	0	-30	0	0	0	1	0	0	122
Unfinished Oils	0	0	1,272	2,068	0	403	0	5,493	0	-1,750	12,893
Motor Gasoline Blending Components	0	0	1,110	-337	0	252	0	230	0	795	5,873
Aviation Gasoline Blending Components	0	0	0	11	0	0	0	11	0	0	0
Finished Petroleum Products	0	42,259	29,410	-10,537	0	63,724	0	0	379	124,477	160,579
Finished Motor Gasoline	0	20,043	6,549	-2,527	0	42,319	0	0	2	66,382	66,325
Finished Leaded Motor Gasoline	0	6,498	1,982	320	0	13,588	0	0	2	22,386	28,877
Finished Unleaded Motor Gasoline	0	13,545	4,567	-2,847	0	28,731	0	0	0	43,996	37,448
Finished Aviation Gasoline	0	12	188	21	0	141	0	0	0	362	462
Naphtha-Type Jet Fuel	0	742	0	40	0	164	0	0	0	946	838
Kerosene-Type Jet Fuel	0	1,441	719	271	0	7,696	0	0	0	10,127	8,729
Kerosene	0	182	267	11	0	51	0	0	2	510	3,457
Distillate Fuel Oil	0	8,744	5,293	-5,323	0	11,521	0	0	4	20,231	45,266
Residual Fuel Oil	0	3,173	15,551	-2,780	0	612	0	0	200	16,355	24,693
Naphtha and Other Oils for Petro. Feed.	0	223	6	13	0	18	0	0	46	214	262
Special Naphthas	0	47	312	9	0	326	0	0	5	690	734
Lubricants	0	575	95	-209	0	641	0	0	69	1,033	3,220
Waxes	0	74	12	4	0	13	0	0	6	97	87
Petroleum Coke	0	1,298	0	-129	0	0	0	0	28	1,141	665
Asphalt and Road Oil	0	3,537	407	123	0	86	0	0	1	4,152	5,433
Still Gas	0	1,937	0	0	0	0	0	0	0	1,937	0
Miscellaneous Products	0	231	9	-61	0	136	0	0	16	299	408
Total	2,561	43,645	66,568	-10,294	-1,375	68,933	0	41,828	445	127,765	199,350

[1] Unaccounted for crude oil is a balancing item
(s) = Less than 500 barrels
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation

Table 7. PAD District II, Supply and Disposition of Crude Oil and Petroleum Products, July 1984
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 32,407	0	15,098	-737	41,305	1,709	17	89,333	433	0	78,671
Natural Gas Liquids and LRGs	10,412	2,334	2,982	435	0	2,263	0	4,605	551	13,270	35,665
Liquefied Petroleum Gases	8,941	2,334	2,982	102	0	1,402	0	2,710	472	12,580	32,162
Pentanes Plus	1,471	0	0	333	0	861	0	1,895	80	690	3,503
Other Liquids	278	0	308	495	0	413	0	1,990	0	-496	24,298
Other Hydrocarbons and Alcohol	278	0	0	-1	0	0	0	277	0	0	138
Unfinished Oils	*0*	*0*	*308*	*566*	*0*	*413*	*0*	1,334	0	-47	16,759
Motor Gasoline Blending Components	0	0	0	-140	0	0	0	309	0	-449	7,315
Aviation Gasoline Blending Components	0	0	0	70	0	0	0	70	0	0	86
Finished Petroleum Products	11	97,607	2,594	-2,855	0	26,154	0	0	756	122,755	122,394
Finished Motor Gasoline	0	52,196	55	971	0	15,632	0	0	0	68,854	57,337
Finished Leaded Motor Gasoline	0	22,487	44	702	0	7,904	0	0	0	31,137	28,452
Finished Unleaded Motor Gasoline	0	29,709	11	269	0	7,728	0	0	0	37,717	28,885
Finished Aviation Gasoline	0	102	0	-97	0	224	0	0	0	229	629
Naphtha-Type Jet Fuel	0	1,065	0	20	0	74	0	0	0	1,159	1,527
Kerosene-Type Jet Fuel	0	4,681	0	-972	0	2,854	0	0	0	6,563	8,819
Kerosene	0	268	0	-47	0	6	0	0	0	227	1,660
Distillate Fuel Oil	0	22,348	258	-4,414	0	7,012	0	0	0	25,204	36,158
Residual Fuel Oil	0	2,245	48	54	0	-383	0	0	0	1,964	3,525
Naphtha and Other Oils for Petro Feed	0	841	8	6	0	51	0	0	89	817	186
Special Naphthas	0	460	2,209	60	0	87	0	0	5	2,811	447
Lubricants	0	811	6	75	0	151	0	0	26	1,017	2,013
Waxes	0	27	7	-3	0	*0*	*0*	*0*	*1*	*30*	*60*
Petroleum Coke	0	3,078	0	201	0	0	0	0	602	2,677	885
Asphalt and Road Oil	0	5,651	0	1,299	0	548	0	0	32	7,466	8,906
Still Gas	0	3,571	0	0	0	0	0	0	0	3,571	0
Miscellaneous Products	11	263	4	-8	0	-102	0	0	1	166	242
Total	43,108	99,941	20,984	-2,662	41,305	30,539	17	95,928	1,740	135,529	261,028

[1] Unaccounted for crude oil is a balancing item.
(s) = Less than 500 barrels.
E = Estimated
Note: Total may not equal sum of components due to independent rounding
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation

Table 8. PAD District III, Supply and Disposition of Crude Oil and Petroleum Products, July 1984
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 130,538	0	58,430	-8,708	-27,705	15,172	0	167,702	0	25	587,157
Natural Gas Liquids and LRGs	36,108	7,254	137	-3,868	0	-2,564	0	7,430	658	28,980	78,121
Liquefied Petroleum Gases	29,622	7,254	131	-3,074	0	-1,951	0	3,432	658	27,892	71,000
Pentanes Plus	6,486	0	7	-794	0	-613	0	3,998	0	1,088	7,121
Other Liquids	1,447	0	4,953	1,778	0	-1,068	0	12,576	0	-5,466	65,615
Other Hydrocarbons and Alcohol	1,447	0	0	6	0	0	0	1,453	0	0	93
Unfinished Oils	0	0	4,621	159	0	-816	0	7,771	0	-3,807	49,303
Motor Gasoline Blending Components	0	0	332	1,641	0	-252	0	3,380	0	-1,659	16,042
Aviation Gasoline Blending Components	0	0	0	-28	0	0	0	-28	0	0	177
Finished Petroleum Products	89	187,369	6,041	3,432	0	-92,473	0	0	4,966	99,492	120,731
Finished Motor Gasoline	1	89,233	682	4,165	0	-59,402	0	0	6	34,673	49,122
Finished Leaded Motor Gasoline	1	33,672	0	1,965	0	-22,184	0	0	6	13,448	21,981
Finished Unleaded Motor Gasoline	0	55,561	682	2,200	0	-37,218	0	0	0	21,225	27,141
Finished Aviation Gasoline	0	524	0	-57	0	-379	0	0	0	88	772
Naphtha-Type Jet Fuel	0	3,380	0	-300	0	-354	0	0	0	2,726	2,531
Kerosene-Type Jet Fuel	0	14,140	0	185	0	-11,343	0	0	276	2,706	12,515
Kerosene	2	2,016	0	-97	0	-57	0	0	1	1,863	2,621
Distillate Fuel Oil	39	37,607	1	-2,097	0	-18,716	0	0	146	16,688	28,174
Residual Fuel Oil	0	8,029	2,506	1,406	0	-229	0	0	1,222	10,489	9,808
Naphtha and Other Oils for Petro Feed.	0	10,100	1,254	460	0	-69	0	0	316	11,430	2,765
Special Naphthas	0	1,066	1,493	121	0	-468	0	0	33	2,179	1,428
Lubricants	0	3,425	59	-583	0	-833	0	0	301	1,767	5,208
Waxes	0	247	9	7	0	-13	0	0	38	212	384
Petroleum Coke	0	5,255	0	-297	0	0	0	0	2,587	2,371	1,526
Asphalt and Road Oil	0	3,622	37	285	0	-634	0	0	14	3,296	2,993
Still Gas	0	7,884	0	0	0	0	0	0	0	7,884	0
Miscellaneous Products	47	841	0	234	0	24	0	0	26	1,120	884
Total	168,182	194,623	69,562	-7,366	-27,705	-80,933	0	187,708	5,624	123,031	851,624

[1] Unaccounted for crude oil is a balancing item.
(s) = Less than 500 barrels
E = Estimated.
Note: Total may not equal sum of components due to independent rounding
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 9. PAD District IV, Supply and Disposition of Crude Oil and Petroleum Products, July 1984
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 17,624	0	900	388	-4,609	0	0	14,298	0	5	13,071
Natural Gas Liquids and LRGs	2,869	170	414	-108	0	-1,632	0	453	0	1,260	1,291
Liquefied Petroleum Gases	2,003	170	309	-105	0	-1,384	0	319	0	674	1,036
Pentanes Plus	866	0	105	-3	0	-248	0	134	0	586	255
Other Liquids	0	0	0	635	0	0	0	615	0	20	4,433
Other Hydrocarbons and Alcohol	0	0	0	0	0	0	0	0	0	0	0
Unfinished Oils	0	0	0	161	0	0	0	218	0	-57	2,558
Motor Gasoline Blending Components	0	0	0	474	0	0	0	397	0	77	1,875
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	6	15,492	227	201	0	4	0	0	2	15,928	13,367
Finished Motor Gasoline	2	7,986	71	-35	0	-63	0	0	0	7,961	5,627
Finished Leaded Motor Gasoline	2	4,469	70	56	0	-18	0	0	0	4,579	3,539
Finished Unleaded Motor Gasoline	0	3,517	1	-91	0	-45	0	0	0	3,382	2,088
Finished Aviation Gasoline	0	42	0	4	0	14	0	0	0	60	52
Naphtha-Type Jet Fuel	0	508	0	-14	0	-124	0	0	0	370	347
Kerosene-Type Jet Fuel	0	827	0	-98	0	515	0	0	0	1,244	886
Kerosene	0	0	0	0	0	0	0	0	0	0	37
Distillate Fuel Oil	0	3,986	133	-171	0	-338	0	0	0	3,610	3,634
Residual Fuel Oil	0	333	11	-53	0	0	0	0	0	291	563
Naphtha and Other Oils for Petro. Feed	0	0	0	1	0	0	0	0	(s)	1	2
Special Naphthas	0	3	(s)	-1	0	0	0	0	0	2	10
Lubricants	0	25	0	4	0	0	0	0	2	27	68
Waxes	0	22	0	0	0	0	0	0	0	22	0
Petroleum Coke	0	255	0	-10	0	0	0	0	0	245	184
Asphalt and Road Oil	0	929	11	577	0	0	0	0	(s)	1,517	1,944
Still Gas	0	525	0	0	0	0	0	0	0	525	0
Miscellaneous Products	4	51	(s)	-3	0	0	0	0	(s)	52	13
Total	20,499	15,662	1,541	1,116	-4,609	-1,628	0	15,366	2	17,213	32,162

1 Unaccounted for crude oil is a balancing item.
(s) = Less than 500 barrels
E = Estimated.
Note: Total may not equal sum of components due to independent rounding
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 10. PAD District V, Supply and Disposition of Crude Oil and Petroleum Products, July 1984
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 89,423	0	5,109	4,068	-6,854	-19,502	24	67,479	2,908	1,833	77,462
Natural Gas Liquids and LRGs	955	1,418	257	-445	0	0	0	765	130	1,290	2,279
Liquefied Petroleum Gases	515	1,418	257	-447	0	0	0	548	130	1,065	2,230
Pentanes Plus	440	0	0	2	0	0	0	217	0	225	49
Other Liquids	372	0	1,400	3,110	0	0	0	4,869	0	13	31,768
Other Hydrocarbons and Alcohol	372	0	0	-3	0	0	0	369	0	0	5
Unfinished Oils	0	0	725	1,845	0	0	0	3,414	0	-844	24,469
Motor Gasoline Blending Components	0	0	670	1,284	0	0	0	1,102	0	852	7,267
Aviation Gasoline Blending Components	0	0	6	-16	0	0	0	-16	0	6	27
Finished Petroleum Products	0	75,809	1,587	1,079	0	2,591	0	0	5,776	75,290	57,896
Finished Motor Gasoline	0	31,443	315	1,461	0	1,514	0	0	273	34,460	21,727
Finished Leaded Motor Gasoline	0	12,724	11	703	0	710	0	0	273	13,875	10,081
Finished Unleaded Motor Gasoline	0	18,719	304	758	0	804	0	0	0	20,585	11,646
Finished Aviation Gasoline	0	228	0	-24	0	0	0	0	0	204	596
Naphtha-Type Jet Fuel	0	1,453	0	302	0	240	0	0	0	1,995	1,615
Kerosene-Type Jet Fuel	0	8,565	340	-89	0	278	0	0	30	9,064	5,754
Kerosene	0	163	0	-8	0	0	0	0	(s)	155	253
Distillate Fuel Oil	0	12,082	460	366	0	521	0	0	1,096	12,333	11,275
Residual Fuel Oil	0	10,781	369	-1,021	0	0	0	0	1,637	8,492	10,616
Naphtha and Other Oils for Petro. Feed.	0	367	0	-20	0	0	0	0	12	335	229
Special Naphthas	0	166	31	-55	0	55	0	0	(s)	197	270
Lubricants	0	415	65	31	0	41	0	0	33	519	1,231
Waxes	0	54	6	11	0	0	0	0	3	69	43
Petroleum Coke	0	3,372	0	-110	0	0	0	0	2,688	574	1,643
Asphalt and Road Oil	0	2,747	0	216	0	0	0	0	1	2,962	2,125
Still Gas	0	3,825	0	0	0	0	0	0	0	3,825	0
Miscellaneous Products	0	148	1	19	0	-58	0	0	4	105	519
Total	90,750	77,227	8,354	7,812	-6,854	-16,911	24	73,113	8,814	78,427	169,405

1 Unaccounted for crude oil is a balancing item
(s) = Less than 500 barrels
E = Estimated.
Note: Total may not equal sum of components due to independent rounding
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 11. Production of Crude Oil (including Lease Condensate) by PAD District and State, for the Most Currently Available Month,[1] May 1984 (Thousand Barrels)

PAD District and State	Production	
	Total	Daily Average
PAD District I		
Florida	1,185	38
New York	E 71	E 2
Pennsylvania	E 363	E 12
Virginia	E 6	E 0
West Virginia	337	11
Adjustment [2]	-37	-1
Total PAD District I	E 1,925	E 62
PAD District II		
Illinois	2,403	78
Indiana	459	15
Kansas	6,694	216
Kentucky	640	21
Michigan	2,515	81
Missouri	E 19	E 1
Nebraska	545	18
North Dakota	4,431	143
Ohio	E 1,274	E 41
Oklahoma	14,089	454
South Dakota	114	4
Tennessee	85	3
Adjustment [2]	-938	-30
Total PAD District II	E 32,330	E 1,043
PAD District III		
Alabama	1,673	54
Arkansas	E 1,600	E 52
Louisiana		
Gulf Coast	E 41,392	E 1,335
Rest of State	2,733	88
Total Louisiana	E 44,125	E 1,423
Mississippi	2,796	90
New Mexico		
Northwestern	593	19
Southeastern	6,031	195
Total New Mexico	6,624	214
Texas		
TRRC District 01	2,199	71
TRRC District 02	3,363	108
TRRC District 03	E 10,770	E 347
TRRC District 04	2,530	82
TRRC District 05	687	22
TRRC District 06, excluding East Texas	3,556	115
TRRC District 07B	3,051	98
TRRC District 07C	3,029	98
TRRC District 08	19,543	630
TRRC District 08A	18,456	595
TRRC District 09	3,422	110
TRRC District 10	1,936	62
East Texas	4,242	137
Total Texas	76,784	2,477
Adjustment [2]	-4,298	-139
Total PAD District III	E 129,304	E 4,171
PAD District IV		
Colorado	2,435	79
Montana	E 2,319	E 75
Utah	E 2,728	E 88
Wyoming	E 10,122	E 327
Adjustment [2]	-24	-1
Total PAD District IV	E 17,580	E 567
PAD District V		
Alaska		
South Alaska	1,944	63
North Slope	52,735	1,701
Adjustment for Alaska[2]	895	29
Total Alaska	55,574	1,793
Arizona	18	1
California		
Central Coastal	6,541	211
East Central	21,699	700
North	16	1
South	6,737	217
Total California	34,993	1,129
Nevada	109	4
Adjustment for Arizona, California, and Nevada[2]	-530	-17
Total PAD District V	90,164	2,909
United States Total	E 271,303	E 8,752

1 Includes the following offshore production (thousand barrels).
Alaska: State - 1,712;
California: Federal - 2,688, State - 3,364;
Louisiana Federal - E 28,120, State - 2,368;
Texas. Federal - E 1,978, State - 157.
U.S Total - E 40,387

2 These adjustments are used to reconcile the national and PADD level sums of the State data with the independently estimated U.S and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual.

Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation
- Data not available.
E = Estimated

See footnotes at end of table.

Table 12. Natural Gas Processing Plant Production of Petroleum Products by PAD District,[1] July 1984 (Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist. V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks	Okla., Kans., Mo	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Natural Gas Liquids	375	304	679	4	1,726	526	8,156	10,412	19,940	3,142	8,109	652	4,265	36,108	2,869	955	51,023
Pentanes Plus	34	38	72	1	225	135	1,110	1,471	3,646	302	1,453	190	895	6,486	866	440	9,335
Liquefied Petroleum Gases	341	266	607	3	1,501	391	7,046	8,941	16,294	2,840	6,656	462	3,370	29,622	2,003	515	41,688
Ethane	109	45	154	0	647	5	3,206	3,858	6,461	1,130	3,081	63	1,024	11,759	283	2	16,056
Propane	140	134	274	2	510	224	2,564	3,300	6,151	1,170	2,140	201	1,395	11,057	1,135	305	16,071
Normal Butane	73	70	143	1	188	135	908	1,232	2,655	335	763	146	648	4,547	442	151	6,515
Isobutane	19	17	36	0	156	27	368	551	1,027	205	672	52	303	2,259	143	57	3,046
Finished Petroleum Products	0	0	0	0	1	0	10	11	23	47	2	12	5	89	6	0	106
Finished Motor Gasoline	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	3
Finished Leaded Motor Gasoline	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	3
Finished Unleaded Motor Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	2
Distillate Fuel Oil	0	0	0	0	0	0	0	0	0	39	0	0	0	39	0	0	39
Special Naphthas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	1	0	10	11	20	8	2	12	5	47	4	0	62
Total Production	375	304	679	4	1,727	526	8,166	10,423	19,963	3,189	8,111	664	4,270	36,197	2,875	955	51,129

[1] Production represents quantity of natural gas processing plant output less input to fractionating facilities

Source: See Explanatory Notes on Data Collection and Estimation

Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, July 1984
(Thousand Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist IV	PAD Dist V	United States
	East Coast	Appala-chian #1	Total	Appala-chian #2	Ind., Ill., Ky.	Minn., Wisc., Daks	Okla., Kans., Mo	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Crude Oil (including lease condensate)	33,146	2,737	35,883	1,822	58,333	8,676	20,502	89,333	15,867	84,718	58,769	5,855	2,493	167,702	14,298	67,479	374,695
Pentanes Plus	38	0	38	0	740	270	885	1,895	1,296	2,092	445	78	87	3,998	134	217	6,282
Liquefied Petroleum Gases	146	26	172	120	1,767	231	592	2,710	496	1,157	1,600	140	39	3,432	319	548	7,181
Ethane	0	0	0	0	2	0	0	2	0	0	56	0	0	56	0	0	58
Propane	0	0	0	0	69	0	0	69	0	2	29	0	0	31	0	5	105
Normal Butane	0	26	26	40	846	155	159	1,200	94	509	732	31	9	1,375	250	344	3,195
Isobutane	146	0	146	80	850	76	433	1,439	402	646	783	109	30	1,970	69	199	3,823
Other Liquids																	
Other Hydrocarbons and Alcohol	1	0	1	0	271	0	6	277	0	350	1,101	0	2	1,453	0	369	2,100
Unfinished Oil (net)	5,384	109	5,493	-30	1,157	37	170	1,334	546	4,617	2,418	145	45	7,771	218	3,414	18,230
Motor Gasoline Blending Components (net)	233	-3	230	12	109	23	165	309	304	2,034	1,190	-21	-127	3,380	397	1,102	5,418
Aviation Gasoline Blending Components (net)	11	0	11	0	46	0	24	70	0	-15	-13	0	0	-28	0	-16	37
Total Input to Refineries	38,959	2,869	41,828	1,924	62,423	9,237	22,344	95,928	18,509	94,953	65,510	6,197	2,539	187,708	15,366	73,113	413,943
Crude Oil Distillation																	
Gross Input (daily average)	1,093	88	1,182	59	1,904	291	671	2,924	525	2,803	1,870	191	81	5,469	466	2,188	12,229
Operable Capacity (daily average)	1,404	174	1,578	66	2,329	304	803	3,502	604	3,802	2,539	294	109	7,348	558	3,099	16,085
Operating Ratio (percent)[1]	77.9	50.6	74.9	89.1	81.7	95.5	83.6	83.5	87.0	73.7	73.6	65.0	73.8	74.4	83.5	70.6	76.0
Crude Oil Qualities																	
Sulfur Content, Weighted Average (percent)	1.04	.35	.99	.63	.92	1.69	.60	.92	.62	1.01	.76	1.43	.71	.89	.88	1.02	.93
API Gravity, Weighted Average	32.40	40.15	32.97	37.01	34.93	31.25	37.69	35.25	37.45	34.90	33.78	32.58	38.94	34.72	35.91	25.49	33.04
Operable Capacity (daily average)	1,404	174	1,578	66	2,329	304	803	3,502	604	3,802	2,539	294	109	7,348	558	3,099	16,085
Operating	1,257	110	1,367	66	2,177	301	730	3,274	589	3,499	2,222	243	107	6,660	530	2,864	14,695
Idle	147	64	211	0	152	3	73	228	15	303	316	51	2	688	28	235	1,390

[1] Represents gross input divided by operable capacity.
Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 14. Refinery Production of Petroleum Products by PAD District, July 1984
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist. V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks	Okla., Kans., Mo	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt	West Coast	
Liquefied Refinery Gases	1,358	28	1,386	39	1,682	233	380	2,334	375	3,241	3,462	74	102	7,254	170	1,418	12,562
For Petrochemical Feedstock Use	404	0	404	0	231	26	40	297	97	1,596	1,846	8	0	3,547	24	239	4,511
For Other Uses	954	28	982	39	1,451	207	340	2,037	278	1,645	1,616	66	102	3,707	146	1,179	8,051
Ethane	35	0	35	0	0	0	0	0	0	742	17	0	0	759	0	0	794
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	346	1	0	0	347	0	0	347
For Other Uses	35	0	35	0	0	0	0	0	0	396	16	0	0	412	0	0	447
Propane	1,110	28	1,138	39	1,654	199	478	2,370	279	2,438	1,489	59	59	4,324	163	949	8,944
For Petrochemical Feedstock Use	364	0	364	0	208	0	40	248	97	1,211	241	0	0	1,549	0	224	2,385
For Other Uses	746	28	774	39	1,446	199	438	2,122	182	1,227	1,248	59	59	2,775	163	725	6,559
Normal Butane	213	0	213	0	5	29	-98	-64	96	126	1,956	15	43	2,236	-17	469	2,837
For Petrochemical Feedstock Use	40	0	40	0	0	21	0	21	0	104	1,604	8	0	1,716	0	15	1,792
For Other Uses	173	0	173	0	5	8	-98	-85	96	22	352	7	43	520	-17	454	1,045
Isobutane for Petro. Feed. Use	0	0	0	0	23	5	0	28	0	-65	0	0	0	-65	24	0	-13
Finished Motor Gasoline	19,009	1,034	20,043	1,134	34,541	4,473	12,048	52,196	9,802	45,179	31,405	1,909	938	89,233	7,986	31,443	200,901
Finished Leaded Motor Gasoline	6,062	436	6,498	524	13,282	1,977	6,704	22,487	4,546	15,906	12,078	670	472	33,672	4,469	12,724	79,850
Finished Unleaded Motor Gasoline	12,947	598	13,545	610	21,259	2,496	5,344	29,709	5,256	29,273	19,327	1,239	466	55,561	3,517	18,719	121,051
Finished Aviation Gasoline	12	0	12	0	86	0	16	102	124	255	145	0	0	524	42	228	908
Naphtha-Type Jet Fuel	694	48	742	31	575	152	307	1,065	985	1,174	681	117	423	3,380	508	1,453	7,148
Kerosene-Type Jet Fuel	1,441	0	1,441	5	3,257	371	1,048	4,681	905	6,985	6,138	6	106	14,140	827	8,565	29,654
Kerosene	145	37	182	94	230	26	-82	268	40	938	961	40	37	2,016	0	163	2,629
Distillate Fuel Oil	7,918	826	8,744	425	13,521	2,283	6,119	22,348	4,215	17,774	12,994	1,846	778	37,607	3,986	12,082	84,767
Residual Fuel Oil	3,100	73	3,173	54	1,441	238	512	2,245	693	4,647	2,431	245	13	8,029	333	10,761	24,561
Naphtha < 400 Deg. For Petro. Feed Use	216	0	216	0	615	0	114	729	89	2,251	126	19	0	2,485	0	163	3,593
Other Oils > 400 Deg For Petro. Feed. Use	7	0	7	0	112	0	0	112	112	4,893	2,610	0	0	7,615	0	204	7,938
Special Naphthas	11	36	47	0	275	0	185	460	92	740	109	125	0	1,066	3	166	1,742
Lubricants	215	360	575	0	482	0	329	811	19	2,112	900	394	0	3,425	25	415	5,251
Waxes	0	74	74	0	11	0	16	27	8	82	92	65	0	247	22	54	424
Petroleum Coke	1,280	18	1,298	27	2,136	320	595	3,078	302	2,689	2,178	75	11	5,255	255	3,372	13,258
Marketable	481	0	481	0	1,105	195	378	1,678	57	1,239	1,439	47	0	2,782	113	2,600	7,654
Catalyst	799	18	817	27	1,031	125	217	1,400	245	1,450	739	28	11	2,473	142	772	5,604
Asphalt and Road Oil	3,422	115	3,537	139	3,618	1,106	788	5,651	605	608	1,192	1,106	111	3,622	929	2,747	16,486
Still Gas	1,835	102	1,937	51	2,521	278	721	3,571	458	4,611	2,559	191	65	7,884	525	3,825	17,742
For Petrochemical Feedstock Use	191	0	191	0	1	0	0	1	5	606	162	0	0	773	1	161	1,127
For Other Uses	1,644	102	1,746	51	2,520	278	721	3,570	453	4,005	2,397	191	65	7,111	524	3,664	16,615
Miscellaneous Products	167	64	231	3	168	23	69	263	-16	506	316	35	0	841	51	148	1,534
Fuel Use	0	25	25	0	-1	0	0	-1	0	-23	247	7	0	231	12	12	279
Non-Fuel Use	167	39	206	3	169	23	69	264	-16	529	69	28	0	610	39	136	1,255
Total Production	40,830	2,815	43,645	2,002	65,271	9,503	23,165	99,941	18,808	98,685	68,299	6,247	2,584	194,623	15,662	77,227	431,098
Processing Gain(-) or Loss(+)[1]	-1,871	54	-1,817	-78	-2,848	-266	-821	-4,013	-299	-3,732	-2,789	-50	-45	-6,915	-296	-4,114	-17,155

[1] Represents the arithmetic difference between input and output.
Note: See Explanatory Note 2.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 15. Percent Refinery Yield of Petroleum Products by PAD District,[1] July 1984

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist IV	PAD Dist V	United States
	East Coast	Appala-chian #1	Total	Appala-chian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo	Total	Texas Inland	Texas Gulf Coast	La Gulf Coast	No La., Ark	New Mexico	Total	Rocky Mt.	West Coast	
Finished Motor Gasoline[2]	48 3	35 5	47.4	55 9	53 2	45.3	50.3	51 8	47.0	44 3	44.2	28.5	36.9	43.9	49.2	41 2	45 8
Finished Aviation Gasoline[3]	.0	.0	0	0	1	.0	.0	0	.8	3	3	.0	0	3	3	3	2
Liquefied Refinery Gases	3 5	1.0	3 3	2 2	2 8	2.7	1 8	2 6	2 3	3 6	5.7	1.2	4 0	4 1	1.2	2 0	3 2
Naphtha-Type Jet Fuel	1 8	1.7	1 8	1 7	1 0	1.7	1.5	1 2	6.0	1 3	1.1	1.9	16 7	1 9	3.5	2 0	1 8
Kerosene-Type Jet Fuel	3 7	0	3 5	3	5 5	4.3	5 1	5 2	5 5	7 8	10.0	1	4 2	8.1	5 7	12 1	7 5
Kerosene	.4	1.3	4	5 2	4	.3	- 4	3	.2	1 0	1.6	.7	1 5	1 1	0	2	7
Distillate Fuel Oil	20 6	29 0	21 1	23 7	22.7	26 2	29 6	24.6	25 7	19 9	21.2	30 8	30 7	21.4	27 5	17 0	21 6
Residual Fuel Oil	8 0	2.6	7 7	3 0	2 4	2.7	2 5	2.5	4 2	5 2	4.0	4 1	5	4 6	2 3	15 2	6 3
Naphtha < 400 Deg. F. Petro Feed. Use	6	0	5	0	1.0	0	6	.8	.5	2 5	.2	3	0	1 4	0	2	9
Other Oils > 400 Deg. F. Petro Feed. Use	0	0	.0	0	.2	0	0	.1	7	5 5	4.3	0	0	4.3	0	3	2 0
Special Naphthas	0	1 3	.1	0	.5	0	9	.5	6	8	.2	2 1	0	6	0	2	4
Lubricants	6	12.6	1.4	0	.8	0	1 6	.9	1	2 4	1.5	6 6	0	2.0	2	.6	1.3
Waxes	0	2 6	.2	0	.0	0	1	.0	0	1	2	1 1	0	.1	2	1	1
Petroleum Coke	3.3	6	3 1	1.5	3.6	3 7	2 9	3.4	1 8	3 0	3 6	1 3	4	3.0	1 8	4 8	3 4
Asphalt and Road Oil	8.9	4 0	8 5	7.8	6.1	12.7	3.8	6.2	3.7	7	1 9	18.4	4.4	2 1	6 4	3 9	4 2
Still Gas	4 8	3 6	4.7	2.8	4.2	3.2	3.5	3 9	2.8	5.2	4 2	3 2	2 6	4 5	3 6	5 4	4 5
Miscellaneous Products	4	2 2	6	.2	3	.3	.3	.3	- 1	.6	5	6	0	5	4	.2	4
Processing Gain(-) or Loss(+)[4]	-4 9	1 9	-4.4	-4.4	-4 8	-3.1	-4.0	-4 4	-1.8	-4.2	-4.6	- 8	-1 8	-3 9	-2.0	-5 8	-4 4

1 Based on crude oil input and net reruns of unfinished oils
2 Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol
3 Based on finished aviation gasoline output plus net output of aviation gasoline blending components
4 Represents the difference between Input and Production
Note Total may not equal sum of components due to independent rounding.
Note: See Explanatory 2.
Source. See Explanatory Notes on Data Collection and Estimation

Table 16. Imports of Crude Oil and Petroleum Products by PAD District, July 1984
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) [1] [2]	**33,500**	**15,098**	**58,430**	**900**	**5,109**	**113,038**
Natural Gas Liquids	**1,276**	**2,982**	**137**	**414**	**257**	**5,067**
Pentanes Plus	876	0	7	105	0	987
Liquefied Petroleum Gases	400	2,982	131	309	257	4,080
Ethane	(s)	1,943	0	0	0	1,944
Propane	163	611	58	157	32	1,021
Normal Butane	142	257	46	91	135	671
Isobutane	95	171	27	61	90	443
Other Liquids [1]	**2,382**	**308**	**4,953**	**0**	**1,400**	**9,044**
Unfinished Oils [1]	1,272	308	4,621	0	725	6,926
Motor Gasoline Blending Components	1,110	0	332	0	670	2,112
Aviation Gasoline Blending Components	0	0	0	0	6	6
Finished Petroleum Products	**29,410**	**2,594**	**6,041**	**227**	**1,587**	**39,860**
Finished Motor Gasoline	6,549	55	682	71	315	7,671
Finished Leaded Motor Gasoline	1,982	44	0	70	11	2,107
Finished Unleaded Motor Gasoline	4,567	11	682	1	304	5,564
Finished Aviation Gasoline	188	0	0	0	0	188
Naphtha-Type Jet Fuel	0	0	0	0	0	0
Kerosene-Type Jet Fuel	719	0	0	0	340	1,059
Bonded Aircraft Fuel	0	0	0	0	0	0
Other	719	0	0	0	340	1,059
Kerosene	267	0	0	0	0	267
Distillate Fuel Oil	5,293	258	1	133	460	6,145
Bonded Ships Bunkers	0	0	0	0	0	0
Other	5,293	258	1	133	460	6,145
Residual Fuel Oil	15,551	48	2,506	11	369	18,486
Bonded Ships Bunkers	0	0	0	0	0	0
Other	15,551	48	2,506	11	369	18,486
Naphtha < 400 Deg. for Petro. Feed. Use	6	8	1,254	0	0	1,269
Other Oils > 400 Deg. for Petro Feed. Use	0	0	0	0	0	0
Special Naphthas	312	2,209	1,493	(s)	31	4,046
Lubricants	95	6	59	0	65	225
Waxes	12	7	9	0	6	34
Asphalt and Road Oil	407	0	37	11	0	455
Miscellaneous Products	9	4	0	(s)	1	14
Total Imports	**66,568**	**20,984**	**69,562**	**1,541**	**8,354**	**167,009**

1 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.
2 Includes crude oil imported for storage in the Strategic Petroleum Reserve.
(s) = Less than 500 barrels
Note. Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 17. Year-to-Date Imports of Crude Oil and Petroleum Products by PAD District, January - July 1984
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) [1] [2]	**186,133**	**110,648**	**379,231**	**6,839**	**43,344**	**726,195**
Natural Gas Liquids	**9,585**	**30,853**	**3,681**	**3,533**	**3,576**	**51,227**
Pentanes plus	6,512	0	731	771	510	8,524
Liquefied Petroleum Gases	3,073	30,853	2,950	2,762	3,066	42,703
Ethane	1	17,981	0	0	0	17,982
Propane	1,764	8,059	1,334	1,410	499	13,066
Normal Butane	785	2,888	1,027	811	1,540	7,051
Isobutane	523	1,925	589	541	1,027	4,605
Other Liquids [1]	23,154	2,460	32,605	0	9,074	67,293
Unfinished Oils [1]	14,495	2,385	30,841	0	4,258	51,979
Motor Gasoline Blending Components	**8,659**	**75**	**1,764**	**0**	**4,811**	**15,308**
Aviation Gasoline Blending Components	0	0	0	0	6	6
Finished Petroleum Products	261,032	7,955	35,560	1,310	10,749	316,606
Finished Motor Gasoline	52,277	722	4,473	411	4,016	61,899
Finished Leaded Motor Gasoline	**24,014**	**439**	**2,800**	**391**	**1,235**	**28,879**
Finished Unleaded Motor Gasoline	28,263	283	1,674	19	2,781	33,020
Finished Aviation Gasoline	458	0	0	2	7	467
Naphtha-Type Jet Fuel	1,862	0	1,665	0	8	3,536
Kerosene-Type Jet Fuel	9,194	0	0	0	704	9,898
Bonded Aircraft Fuel	0	0	0	0	0	0
Other	9,194	0	0	0	704	9,898
Kerosene	1,719	0	6	0	(s)	1,725
Distillate Fuel Oil	49,085	1,640	957	780	1,313	53,776
Bonded Ships Bunkers	0	0	0	0	0	0
Other	49,085	1,640	957	780	1,313	53,776
Residual Fuel Oil	140,464	1,565	14,425	100	3,107	159,661
Bonded Ships Bunkers	0	0	0	0	0	0
Other	140,464	1,565	14,425	100	3,107	159,661
Naphtha < 400 Deg. for Petro Feed. Use	702	99	5,547	0	0	6,349
Other Oils > 400 Deg. for Petro. Feed. Use	0	0	0	0	0	0
Special Naphthas	2,282	3,493	6,614	3	1,055	13,447
Lubricants	1,357	76	227	1	486	2,147
Waxes	92	37	143	0	22	294
Asphalt and Road Oil	603	16	72	11	3	705
Miscellaneous Products	937	306	1,432	2	27	2,703
Total Imports	479,904	151,915	451,077	11,681	66,743	1,161,321

1 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed, all other products are reported by the PAD District of entry.
2 Includes crude oil imported for storage in the Strategic Petroleum Reserve.
(s) = Less than 500 barrels.
Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District, July 1984
(Thousand Barrels)

Source	Crude Oil [1]	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products [2]	Total Products	Total Petroleum	Total (Daily Average)
	All PAD Districts													
Arab OPEC														
Algeria	5,787	0	345	0	0	0	0	885	1,847	259	1,165	4,500	10,288	332
Iraq	2,078	0	0	0	0	0	0	0	0	0	0	0	2,078	67
Kuwait	199	0	0	0	0	0	0	0	0	0	0	0	199	6
Saudi Arabia	13,193	102	0	0	0	0	0	0	0	0	(s)	102	13,295	429
United Arab Emirates	2,762	0	253	447	0	0	0	0	0	0	0	701	3,463	112
Subtotal Arab OPEC	24,019	102	598	447	0	0	0	885	1,847	259	1,165	5,303	29,322	946
Other OPEC														
Ecuador	1,483	0	0	0	0	0	0	0	477	0	0	477	1,961	63
Gabon	3,269	0	0	0	0	0	0	0	0	0	0	0	3,269	105
Indonesia	10,644	0	248	0	153	11	0	2	607	229	(s)	1,250	11,894	384
Nigeria	6,089	0	0	0	0	0	0	0	0	0	248	248	6,337	204
Venezuela	8,436	0	440	3	2,634	487	0	1,918	2,392	0	266	8,139	16,575	535
Subtotal Other OPEC	29,920	0	688	3	2,787	498	0	1,920	3,476	229	514	10,114	40,034	1,291
Other														
Angola	2,113	0	0	0	0	0	0	0	0	0	0	0	2,113	68
Australia	783	0	0	0	94	29	0	57	545	0	73	797	1,580	51
Bahamas	0	0	193	0	0	0	0	0	0	0	241	434	434	14
Brazil	0	0	0	0	466	0	0	0	1,443	0	0	1,909	1,909	62
Canada	9,036	3,744	328	0	178	0	5	677	1,117	2,298	410	8,756	17,791	574
Congo	2,414	0	0	0	0	0	0	0	395	0	0	395	2,809	91
Egypt	448	0	0	0	0	0	0	0	0	0	0	0	448	14
France	0	0	0	0	215	0	0	0	299	0	(s)	514	514	17
Liberia	0	0	0	0	0	0	0	0	134	0	0	134	134	4
Malaysia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	20,405	133	1,469	0	0	0	0	1	303	292	268	2,465	22,871	738
Netherlands	0	0	0	29	893	0	0	270	430	5	252	1,879	1,879	61
Netherlands Antilles	0	0	611	0	0	129	0	185	2,107	0	51	3,082	3,082	99
Norway	5,564	0	0	0	0	0	0	0	0	0	0	0	5,564	179
Oman	556	0	0	0	0	0	0	0	0	0	0	0	556	18
People's Republic of China	677	0	173	998	0	0	0	0	0	0	0	1,171	1,848	60
Peru	0	0	184	0	0	0	0	0	275	0	0	459	459	15
Puerto Rico	0	0	83	0	245	0	0	0	0	425	86	841	841	27
Romania	0	0	0	380	409	0	0	0	0	239	0	1,029	1,029	33
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	2,822	0	0	0	0	0	0	0	902	0	0	902	3,724	120
Tunisia	2	0	0	0	0	0	0	0	0	0	0	0	2	(s)
United Kingdom	10,902	101	0	0	207	0	0	0	0	0	5	313	11,215	362
Virgin Islands	0	0	1,720	0	1,597	360	262	1,220	3,745	51	104	9,059	9,059	292
Zaire	1,207	0	0	0	0	0	0	0	0	0	0	0	1,207	39
Other Western Hemisphere	0	0	0	0	0	0	0	318	895	0	0	1,212	1,212	39
Other Eastern Hemisphere	2,171	(s)	878	254	580	44	0	611	574	248	12	3,201	5,372	173
Subtotal Other	59,099	3,978	5,640	1,661	4,884	561	267	3,340	13,163	3,558	1,501	38,553	97,652	3,150
Total Imports	113,038	4,080	6,926	2,112	7,671	1,059	267	6,145	18,486	4,046	3,180	53,971	167,009	5,387
	PAD District I													
Arab OPEC														
Algeria	1,730	0	0	0	0	0	0	885	1,170	0	528	2,584	4,313	139
Saudi Arabia	3,637	102	0	0	0	0	0	0	0	0	(s)	102	3,739	121

See footnotes at end of table

Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District, July 1984 (Thousand Barrels) (continued)

Source	Crude Oil 1	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
							PAD District I							
United Arab Emirates	0	0	0	447	0	0	0	0	0	0	0	447	447	14
Subtotal Arab OPEC	5,367	102	0	447	0	0	0	885	1,170	0	528	3,133	8,500	274
Other OPEC														
Ecuador	0	0	0	0	0	0	0	0	477	0	0	477	477	15
Gabon	1,379	0	0	0	0	0	0	0	0	0	0	0	1,379	44
Indonesia	2,201	0	0	0	0	0	0	0	375	0	0	375	2,576	83
Nigeria	883	0	0	0	0	0	0	0	0	0	0	0	883	28
Venezuela	3,386	0	0	0	1,952	231	0	1,918	1,771	0	266	6,137	9,523	307
Subtotal Other OPEC	7,849	0	0	0	1,952	231	0	1,918	2,623	0	266	6,989	14,838	479
Other														
Angola	697	0	0	0	0	0	0	0	0	0	0	0	697	22
Australia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brazil	0	0	0	0	466	0	0	0	1,443	0	0	1,909	1,909	62
Canada	1,216	197	5	0	33	0	5	261	994	22	261	1,777	2,992	97
Congo	1,359	0	0	0	0	0	0	0	395	0	0	395	1,754	57
Egypt	448	0	0	0	0	0	0	0	0	0	0	0	448	14
France	0	0	0	0	215	0	0	0	299	0	(s)	514	514	17
Libena	0	0	0	0	0	0	0	0	134	0	0	134	134	4
Mexico	4,123	0	0	0	0	0	0	0	296	291	188	775	4,898	158
Netherlands	0	0	0	29	893	0	0	270	430	0	249	1,872	1,872	60
Netherlands Antilles	0	0	611	0	0	129	0	185	2,107	0	0	3,032	3,032	98
Norway	3,263	0	0	0	0	0	0	0	0	0	0	0	3,263	105
Oman	0	0	0	0	0	0	0	0	0	0	0	0	0	0
People's Republic of China	677	0	0	0	0	0	0	0	0	0	0	0	677	22
Peru	0	0	0	0	0	0	0	0	275	0	0	275	275	9
Puerto Rico	0	0	83	0	245	0	0	0	0	0	86	415	415	13
Romania	0	0	0	380	409	0	0	0	0	0	0	789	789	25
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	463	0	0	0	0	0	0	0	902	0	0	902	1,365	44
Tunisia	2	0	0	0	0	0	0	0	0	0	0	0	2	(s)
United Kingdom	6,745	101	0	0	207	0	0	0	0	0	5	313	7,058	228
Virgin Islands	0	0	573	0	1,597	360	262	1,220	3,255	0	0	7,268	7,268	234
Zaire	222	0	0	0	0	0	0	0	0	0	0	0	222	7
Other Western Hemisphere	0	0	0	0	0	0	0	0	895	0	0	895	895	29
Other Eastern Hemisphere	1,068	(s)	0	254	531	0	0	554	333	0	11	1,683	2,752	89
Subtotal Other	20,284	298	1,272	663	4,597	488	267	2,490	11,758	312	800	22,946	43,230	1,395
Total Imports	33,500	400	1,272	1,110	6,549	719	267	5,293	15,551	312	1,594	33,068	66,568	2,147
							PAD District II							
Arab OPEC														
Algeria	620	0	0	0	0	0	0	0	0	0	0	0	620	20
Kuwait	199	0	0	0	0	0	0	0	0	0	0	0	199	6
Saudi Arabia	199	0	0	0	0	0	0	0	0	0	0	0	199	6
United Arab Emirates	397	0	0	0	0	0	0	0	0	0	0	0	397	13
Subtotal Arab OPEC	1,415	0	0	0	0	0	0	0	0	0	0	0	1,415	46

See footnotes at end of table.

Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District, July 1984 (Thousand Barrels) (continued)

Source	Crude Oil 1	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
PAD District II														
Other OPEC														
Ecuador	369	0	0	0	0	0	0	0	0	0	0	0	369	12
Nigeria	1,434	0	0	0	0	0	0	0	0	0	0	0	1,434	46
Subtotal Other OPEC	1,802	0	0	0	0	0	0	0	0	0	0	0	1,802	58
Other														
Canada	6,564	2,982	308	0	55	0	0	258	48	2,209	25	5,885	12,449	402
Congo	530	0	0	0	0	0	0	0	0	0	0	0	530	17
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico	3,655	0	0	0	0	0	0	0	0	0	0	0	3,655	118
Netherlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	456	0	0	0	0	0	0	0	0	0	0	0	456	15
United Kingdom	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Other Eastern Hemisphere	676	0	0	0	0	0	0	0	0	0	(s)	(s)	677	22
Subtotal Other	11,881	2,982	308	0	55	0	0	258	48	2,209	25	5,885	17,766	573
Total Imports	15,098	2,982	308	0	55	0	0	258	48	2,209	25	5,885	20,984	677
PAD District III														
Arab OPEC														
Algeria	3,438	0	345	0	0	0	0	0	676	259	637	1,917	5,355	173
Iraq	2,078	0	0	0	0	0	0	0	0	0	0	0	2,078	67
Saudi Arabia	9,356	0	0	0	0	0	0	0	0	0	0	0	9,356	302
United Arab Emirates	2,365	0	253	0	0	0	0	0	0	0	0	253	2,619	84
Subtotal Arab OPEC	17,237	0	598	0	0	0	0	0	676	259	637	2,170	19,407	626
Other OPEC														
Ecuador	1,114	0	0	0	0	0	0	0	0	0	0	0	1,114	36
Gabon	1,890	0	0	0	0	0	0	0	0	0	0	0	1,890	61
Indonesia	4,472	0	0	0	0	0	0	0	199	229	0	428	4,900	158
Nigeria	3,772	0	0	0	0	0	0	0	0	0	248	248	4,020	130
Venezuela	5,049	0	440	3	682	0	0	0	621	0	0	1,746	6,795	219
Subtotal Other OPEC	16,298	0	440	3	682	0	0	0	821	229	248	2,422	18,720	604
Other														
Angola	1,416	0	0	0	0	0	0	0	0	0	0	0	1,416	46
Australia	0	0	0	0	0	0	0	0	519	0	29	549	549	18
Bahamas	0	0	193	0	0	0	0	0	0	0	241	434	434	14
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	(s)	0	0	0	0	0	0	0	0	40	0	40	40	1
Congo	526	0	0	0	0	0	0	0	0	0	0	0	526	17
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico	12,627	131	1,469	0	0	0	0	1	0	1	75	1,677	14,304	461
Netherlands	0	0	0	0	0	0	0	0	0	0	3	3	3	(s)
Netherlands Antilles	0	0	0	0	0	0	0	0	0	0	29	29	29	1
Norway	2,300	0	0	0	0	0	0	0	0	0	0	0	2,300	74
Oman	556	0	0	0	0	0	0	0	0	0	0	0	556	18
People's Republic of China	0	0	0	329	0	0	0	0	0	0	0	329	329	11
Peru	0	0	184	0	0	0	0	0	0	0	0	184	184	6

See footnotes at end of table

Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District, July 1984 (Thousand Barrels) (continued)

Source	Crude Oil [1]	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil. Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Products [2]	Total Products	Total Petroleum	Total (Daily Average)
PAD District III														
Other														
Puerto Rico	0	0	0	0	0	0	0	0	0	425	0	425	425	14
Romania	0	0	0	0	0	0	0	0	0	239	0	239	239	8
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	1,903	0	0	0	0	0	0	0	0	0	0	0	1,903	61
United Kingdom	4,157	0	0	0	0	0	0	0	0	0	0	0	4,157	134
Virgin Islands	0	0	1,147	0	0	0	0	0	490	51	104	1,792	1,792	58
Zaire	985	0	0	0	0	0	0	0	0	0	0	0	985	32
Other Western Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Eastern Hemisphere	426	0	590	0	0	0	0	0	0	248	(s)	838	1,264	41
Subtotal Other	24,896	131	3,583	329	0	0	0	1	1,009	1,005	482	6,539	31,435	1,014
Total Imports	58,430	131	4,621	332	682	0	0	1	2,506	1,493	1,366	11,132	69,562	2,244
PAD District IV														
Other														
Canada	900	309	0	0	71	0	0	133	11	(s)	116	641	1,541	50
France	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Other	900	309	0	0	71	0	0	133	11	(s)	116	641	1,541	50
Total Imports	900	309	0	0	71	0	0	133	11	(s)	116	641	1,541	50
PAD District V														
Other OPEC														
Indonesia	3,970	0	248	0	153	11	0	2	33	0	(s)	447	4,418	143
Venezuela	0	0	0	0	0	256	0	0	0	0	0	256	256	8
Subtotal Other OPEC	3,970	0	248	0	153	267	0	2	33	0	(s)	703	4,674	151
Other														
Australia	783	0	0	0	94	29	0	57	26	0	43	249	1,032	33
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	356	255	15	0	19	0	0	25	63	27	8	413	769	25
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Malaysia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	0	2	0	0	0	0	0	(s)	6	0	5	14	14	(s)
Netherlands	0	0	0	0	0	0	0	0	0	5	0	5	5	(s)
Netherlands Antilles	0	0	0	0	0	0	0	0	0	0	22	22	22	1
People's Republic of China	0	0	173	670	0	0	0	0	0	0	0	842	842	27
United Kingdom	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Western Hemisphere	0	0	0	0	0	0	0	318	0	0	0	318	318	10
Other Eastern Hemisphere	0	0	288	0	49	44	0	58	241	0	(s)	680	680	22
Subtotal Other	1,139	257	477	670	162	73	0	458	337	31	78	2,542	3,681	119
Total Imports	5,109	257	725	670	315	340	0	460	369	31	79	3,245	8,354	269

1 Includes crude oil imported for storage in the Strategic Petroleum Reserve
2 Includes aviation gasoline, aviation blending components, waxes, asphalt, lubricants, pentanes plus, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.
(s) = Less than 500 barrels or less than 500 barrels per day.
Note: Total may not equal sum of components due to independent rounding
Source. See Explanatory Notes on Data Collection and Estimation

Table 19. Year-to-Date Imports Of Crude Oil and Petroleum Products by Source and PAD District, January - July 1984
(Thousand Barrels)

Source	Crude Oil 1	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
	All PAD Districts													
Arab OPEC														
Algeria	42,170	180	598	0	434	327	0	3,826	13,480	2,304	4,391	25,541	67,711	318
Iraq	2,179	0	0	0	0	0	0	0	0	0	0	0	2,179	10
Kuwait	4,103	0	0	0	0	0	0	0	3,685	0	0	3,685	7,788	37
Saudi Arabia	75,970	605	1,119	0	0	0	0	0	1,013	0	(s)	2,737	78,707	370
United Arab Emirates	17,519	0	1,049	993	0	221	0	0	1,745	0	1,586	5,594	23,113	109
Subtotal Arab OPEC	141,942	785	2,766	993	434	548	0	3,826	19,924	2,304	5,977	37,557	179,498	843
Other OPEC														
Ecuador	10,523	0	0	0	0	0	0	0	1,870	0	0	1,870	12,393	58
Gabon	11,803	0	0	0	0	0	0	0	246	60	0	306	12,110	57
Indonesia	60,795	1,356	2,035	0	1,066	139	0	268	4,580	696	73	10,213	71,008	333
Iran	2,071	0	0	0	0	0	0	0	0	0	0	0	2,071	10
Nigeria	51,900	0	1,582	0	0	0	0	53	90	0	248	1,973	53,873	253
Venezuela	54,382	0	3,227	672	12,749	2,693	0	11,961	25,865	68	772	58,008	112,390	528
Subtotal Other OPEC	191,475	1,356	6,845	672	13,815	2,832	0	12,283	32,651	824	1,092	72,370	263,845	1,239
Other														
Angola	17,981	0	0	0	0	0	0	0	568	0	0	568	18,549	87
Australia	3,572	96	0	0	404	65	0	123	1,378	0	208	2,274	5,847	27
Bahamas	0	0	5,731	0	0	659	69	3,535	4,749	0	2,352	17,095	17,095	80
Bolivia	260	0	0	0	0	0	0	0	0	0	0	0	260	1
Brazil	2	0	0	0	4,698	0	0	0	6,522	202	24	11,445	11,447	54
Brunei	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	71,583	38,288	2,155	75	3,440	8	37	7,209	5,911	4,016	2,759	63,897	135,479	636
Congo	7,842	0	0	0	0	0	0	0	1,305	0	0	1,305	9,146	43
Egypt	2,290	0	0	0	0	0	0	0	0	0	0	0	2,290	11
France	0	(s)	(s)	0	376	0	(s)	0	299	(s)	11	687	687	3
Ghana	0	0	0	0	0	0	0	0	119	0	0	119	119	1
Liberia	0	0	0	0	0	0	0	0	1,882	0	0	1,882	1,882	9
Malaysia	0	0	125	0	158	7	0	20	99	0	0	409	409	2
Mexico	141,438	1,604	6,852	3,511	439	244	0	1,094	1,030	293	487	15,554	156,993	737
Netherlands	1,045	(s)	0	378	5,628	196	0	6,441	1,418	336	765	15,162	16,207	76
Netherlands Antilles	0	28	7,593	426	5,831	735	0	2,382	27,305	0	155	44,454	44,454	209
Norway	24,770	(s)	0	0	0	451	0	366	0	0	0	817	25,587	120
Oman	1,549	0	0	0	0	0	0	0	1,239	0	0	1,239	2,787	13
People's Republic of China	2,342	0	494	4,703	599	0	0	0	0	347	3	6,146	8,487	40
Peru	224	0	557	0	0	0	0	0	4,597	0	0	5,153	5,377	25
Puerto Rico	0	0	1,209	0	2,716	253	0	1,011	0	2,637	1,288	9,114	9,114	43
Romania	0	0	252	2,894	1,326	0	0	0	389	423	2,870	8,154	8,154	38
Spain	0	0	218	0	967	1,016	0	123	782	0	18	3,123	3,123	15
Trinidad and Tobago	16,356	0	13	0	0	0	0	0	1,731	7	16	1,767	18,124	85
Tunisia	4	0	0	0	0	0	0	0	0	0	0	0	4	(s)
United Kingdom	70,282	418	737	370	2,401	325	0	163	655	156	714	5,939	76,220	358
Virgin Islands	0	0	8,509	0	11,116	4,579	1,553	11,848	28,832	306	339	67,082	67,082	315
Zaire	6,733	0	0	0	0	0	0	0	0	0	0	0	6,733	32
Other Western Hemisphere	572	127	1,699	0	0	0	6	361	6,843	203	144	9,382	9,955	47

See footnotes at end of table

Table 19. Year-to-Date Imports Of Crude Oil and Petroleum Products by Source and PAD District, January - July 1984
(Thousand Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
	All PAD Districts													
Other														
Other Eastern Hemisphere	23,934	2	6,224	1,287	7,552	1,517	60	2,990	9,435	1,393	1,972	32,432	56,366	265
Subtotal Other ..	392,778	40,562	42,368	13,643	47,649	10,054	1,725	37,667	107,086	10,319	14,126	325,200	717,978	3,371
Total Imports	726,195	42,703	51,979	15,308	61,899	13,434	1,725	53,776	159,661	13,447	21,195	435,126	1,161,321	5,452
	PAD District I													
Arab OPEC														
Algeria	10,895	180	0	0	434	327	0	3,776	12,804	218	1,271	19,010	29,904	140
Kuwait	253	0	0	0	0	0	0	0	0	0	0	0	253	1
Saudi Arabia	15,676	605	867	0	0	0	0	0	0	0	(s)	1,472	17,148	81
United Arab Emirates	436	0	0	993	0	0	0	0	434	0	1,338	2,765	3,201	15
Subtotal Arab OPEC	27,260	785	867	993	434	327	0	3,776	13,238	218	2,608	23,246	50,506	237
Other OPEC														
Ecuador	302	0	0	0	0	0	0	0	1,870	0	0	1,870	2,172	10
Gabon	2,953	0	0	0	0	0	0	0	246	60	0	306	3,260	15
Indonesia	15,895	0	228	0	0	0	0	0	1,389	0	0	1,617	17,512	82
Nigeria	15,338	0	0	0	0	0	0	50	90	0	0	140	15,478	73
Venezuela	15,265	0	0	0	10,830	2,437	0	11,961	24,368	0	605	50,201	65,465	307
Subtotal Other OPEC	49,753	0	228	0	10,830	2,437	0	12,012	27,963	60	605	54,134	103,887	488
Other														
Angola	10,271	0	0	0	0	0	0	0	568	0	0	568	10,839	51
Australia	0	0	0	0	0	0	0	0	746	0	0	746	746	4
Bahamas	0	0	481	0	0	659	69	3,256	4,749	0	180	9,394	9,394	44
Brazil	2	0	0	0	3,542	0	0	0	6,259	0	(s)	9,801	9,802	46
Canada	7,676	1,742	41	0	1,403	0	36	4,649	4,175	138	1,321	13,505	21,181	99
Congo	3,791	0	0	0	0	0	0	0	1,305	0	0	1,305	5,096	24
Egypt	1,616	0	0	0	0	0	0	0	0	0	0	0	1,616	8
France	0	(s)	0	0	376	0	0	0	299	(s)	1	676	676	3
Ghana	0	0	0	0	0	0	0	0	119	0	0	119	119	1
Liberia	0	0	0	0	0	0	0	0	1,882	0	0	1,882	1,882	9
Mexico	19,201	0	0	3,216	(s)	215	0	885	625	291	221	5,453	24,654	116
Netherlands	1	(s)	0	219	5,628	196	0	6,441	1,418	36	250	14,188	14,188	67
Netherlands Antilles	0	0	6,595	426	4,753	695	0	2,023	27,113	0	7	41,613	41,613	195
Norway	16,316	0	0	0	0	89	0	366	0	0	0	456	16,772	79
Oman	993	0	0	0	0	0	0	0	585	0	0	585	1,578	7
People's Republic of China	1,982	0	0	0	0	0	0	0	0	0	(s)	(s)	1,982	9
Peru	2	0	0	0	0	0	0	0	4,335	0	0	4,335	4,337	20
Puerto Rico	0	0	1,209	0	2,716	253	0	772	0	895	1,238	7,083	7,083	33
Romania	0	0	252	2,672	1,326	0	0	0	389	183	2,870	7,693	7,693	36
Spain	0	0	0	0	967	825	0	123	782	0	(s)	2,697	2,697	13
Trinidad and Tobago	2,754	0	13	0	0	0	0	0	1,731	7	0	1,751	4,505	21
Tunisia	4	0	0	0	0	0	0	0	0	0	0	0	4	(s)
United Kingdom	36,285	417	471	79	2,274	154	0	163	655	(s)	287	4,499	40,784	191

See footnotes at end of table.

Table 19. Year-to-Date Imports Of Crude Oil and Petroleum Products by Source and PAD District, January - July 1984
(Thousand Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil. Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
	PAD District I													
Other														
Virgin Islands	0	0	3,723	0	11,116	4,579	1,553	11,848	28,007	0	0	60,826	60,826	286
Zaire	2,990	0	0	0	0	0	0	0	0	0	0	0	2,990	14
Other Western Hemisphere	0	127	611	0	0	0	0	32	6,843	0	8	7,620	7,620	36
Other Eastern Hemisphere	*5,237*	*2*	*4*	*1,053*	*6,913*	*627*	*60*	*2,739*	*6,679*	*455*	*1,064*	*19,597*	*24,834*	*117*
Subtotal Other	109,120	2,288	13,400	7,665	41,013	8,292	1,719	33,298	99,263	2,004	7,448	216,391	325,511	1,528
Total Imports	186,133	3,073	14,495	8,659	52,277	11,056	1,719	49,085	140,464	2,282	10,661	293,771	479,904	2,253
	PAD District II													
Arab OPEC														
Algeria	*5,359*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*5,359*	*25*
Kuwait	199	0	0	0	0	0	0	0	0	0	0	0	199	1
Saudi Arabia	2,291	0	0	0	0	0	0	0	0	0	0	0	2,291	11
United Arab Emirates	1,472	0	0	0	0	0	0	0	0	0	0	0	1,472	7
Subtotal Arab OPEC	9,322	0	0	0	0	0	0	0	0	0	0	0	9,322	44
Other OPEC														
Ecuador	1,799	0	0	0	0	0	0	0	0	0	0	0	1,799	8
Indonesia	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Iran	1,040	0	0	0	0	0	0	0	0	0	0	0	1,040	5
Nigeria	6,266	0	203	0	0	0	0	0	0	0	0	203	6,469	30
Venezuela	417	0	0	0	0	0	0	0	0	0	0	0	417	2
Subtotal Other OPEC	9,521	0	203	0	0	0	0	0	0	0	0	203	9,725	46
Other														
Australia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bahamas	*0*	*0*	*218*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*218*	*1*
Canada	51,423	30,851	1,964	75	722	0	0	1,640	1,565	3,493	532	40,841	92,264	433
Congo	1,957	0	0	0	0	0	0	0	0	0	0	0	1,957	9
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico	28,267	0	0	0	0	0	0	0	0	0	0	0	28,267	133
Netherlands	1,044	0	0	0	0	0	0	0	0	0	0	0	1,044	5
Norway	519	0	0	0	0	0	0	0	0	0	0	0	519	2
Peru	222	0	0	0	0	0	0	0	0	0	0	0	222	1
Spain	*0*	*0*	*0*	*0*	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	5,563	0	0	0	0	0	0	0	0	0	0	0	5,563	26
United Kingdom	1,727	1	0	0	0	0	0	0	0	0	1	2	1,730	8
Other Western Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Eastern Hemisphere	1,083	(s)	0	0	0	0	0	0	0	0	2	2	1,085	5
Subtotal Other	91,805	30,853	2,182	75	722	0	0	1,640	1,565	3,493	535	41,064	132,869	624
Total Imports	110,648	30,853	2,365	75	722	0	0	1,640	1,565	3,493	535	41,064	152,912	718

See footnotes at end of table

Table 19. Year-to-Date Imports Of Crude Oil and Petroleum Products by Source and PAD District, January - July 1984
(Thousand Barrels)
(continued)

Source	Crude Oil [1]	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil. Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Products [2]	Total Products	Total Petroleum	Total (Daily Average)
	PAD District III													
Arab OPEC														
Algeria	24,983	0	345	0	0	0	0	50	676	2,086	3,120	6,278	31,261	147
Iraq	2,179	0	0	0	0	0	0	0	0	0	0	0	2,179	10
Kuwait	3,652	0	0	0	0	0	0	0	3,685	0	0	3,685	7,336	34
Saudi Arabia	58,002	0	0	0	0	0	0	0	1,013	0	0	1,013	59,015	277
United Arab Emirates	15,611	0	780	0	0	221	0	0	1,311	0	249	2,561	18,171	85
Subtotal Arab OPEC	104,427	0	1,125	0	0	221	0	50	6,686	2,086	3,369	13,537	117,963	554
Other OPEC														
Ecuador	8,062	0	0	0	0	0	0	0	0	0	0	0	8,062	38
Gabon	8,850	0	0	0	0	0	0	0	0	0	0	0	8,850	42
Indonesia	13,881	1,356	0	0	0	0	0	0	1,918	229	71	3,574	17,456	82
Iran	1,032	0	0	0	0	0	0	0	0	0	0	0	1,032	5
Nigeria	30,296	0	1,379	0	0	0	0	3	0	0	248	1,630	31,926	150
Venezuela	38,288	0	3,227	672	1,674	0	0	0	1,497	68	167	7,305	45,592	214
Subtotal Other OPEC	100,409	1,356	4,606	672	1,674	0	0	3	3,416	297	486	12,509	112,918	530
Other														
Angola	7,710	0	0	0	0	0	0	0	0	0	0	0	7,710	36
Australia	2	0	0	0	0	0	0	0	519	0	164	684	685	3
Bahamas	0	0	5,032	0	0	0	0	279	0	0	2,172	7,483	7,483	35
Bolivia	260	0	0	0	0	0	0	0	0	0	0	0	260	1
Brazil	0	0	0	0	1,156	0	0	0	263	202	23	1,645	1,645	8
Canada	1	0	0	0	0	0	0	0	0	226	71	297	298	1
Congo	2,093	0	0	0	0	0	0	0	0	0	0	0	2,093	10
Egypt	674	0	0	0	0	0	0	0	0	0	0	0	674	3
France	0	0	(s)	0	0	0	(s)	0	0	0	10	11	11	(s)
Malaysia	0	0	125	0	0	0	0	0	0	0	0	125	125	1
Mexico	93,970	1,567	6,852	294	439	29	0	199	360	2	244	9,985	103,956	488
Netherlands	0	0	0	160	0	0	0	0	0	295	515	970	970	5
Netherlands Antilles	0	28	998	0	1,078	0	0	358	0	0	59	2,521	2 521	12
Norway	7,935	(s)	0	0	0	361	0	0	0	0	0	361	8,297	39
Oman	556	0	0	0	0	0	0	0	654	0	0	654	1,209	6
People's Republic of China	360	0	0	329	0	0	0	0	0	0	0	329	688	3
Peru	0	0	557	0	0	0	0	0	262	0	0	818	818	4
Puerto Rico	0	0	0	0	0	0	0	0	0	1,742	0	1,742	1,742	8
Romania	0	0	0	0	0	0	0	0	0	239	0	239	239	1
Spain	0	0	218	0	0	190	0	0	0	0	18	427	427	2
Trinidad and Tobago	8,039	0	0	0	0	0	0	0	0	0	16	16	8,056	38
United Kingdom	32,269	0	266	291	127	171	0	(s)	0	156	426	1 437	33,706	158
Virgin Islands	0	0	4,785	0	0	0	0	0	825	306	339	6,256	6,256	29
Zaire	3,743	0	0	0	0	0	0	0	0	0	0	0	3,743	18
Other Western Hemisphere	572	0	1,088	0	0	0	6	12	0	203	136	1,444	2,017	9
Other Eastern Hemisphere	16,210	0	5,188	18	0	693	0	56	1,441	858	103	8,358	24,567	115
Subtotal Other	174,394	1,594	25,110	1,092	2,800	1,445	6	904	4,323	4,230	4,297	45,801	220,195	1,034
Total Imports	379,231	2,950	30,841	1,764	4,473	1,665	6	957	14,425	6,614	8,151	71,846	451,077	2,118

See footnotes at end of table

Table 19. Year-to-Date Imports Of Crude Oil and Petroleum Products by Source and PAD District, January - July 1984
(Thousand Barrels)
(continued)

Source	Crude Oil [1]	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Products [2]	Total Products	Total Petroleum	Total (Daily Average)
	PAD District IV													
Other														
Canada	6,839	2,762	0	0	411	0	0	780	100	3	786	4,842	11,681	55
France	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Eastern Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Other	6,839	2,762	0	0	411	0	0	780	100	3	786	4,842	11,681	55
Total Imports	6,839	2,762	0	0	411	0	0	780	100	3	786	4,842	11,681	55
	PAD District V													
Arab OPEC														
Algeria	934	0	253	0	0	0	0	0	0	0	0	253	1,187	6
Saudi Arabia	0	0	252	0	0	0	0	0	0	0	0	252	252	1
United Arab Emirates	0	0	269	0	0	0	0	0	0	0	0	269	269	1
Subtotal Arab OPEC	934	0	774	0	0	0	0	0	0	0	0	774	1,707	8
Other OPEC														
Ecuador	360	0	0	0	0	0	0	0	0	0	0	0	360	2
Indonesia	31,019	0	1,808	0	1,066	139	0	268	1,272	467	1	5,022	36,040	169
Venezuela	413	0	0	0	246	256	0	0	0	0	0	502	915	4
Subtotal Other OPEC	31,791	0	1,808	0	1,312	395	0	268	1,272	467	1	5,524	37,315	175
Other														
Australia	3,571	96	0	0	404	65	0	123	113	0	44	845	4,416	21
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brunei	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	5,644	2,932	151	0	904	8	(s)	139	70	156	50	4,412	10,055	47
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Malaysia	0	0	0	0	158	7	0	20	99	0	0	284	284	1
Mexico	0	37	0	0	0	0	0	11	46	0	22	116	116	1
Netherlands	0	(s)	0	0	0	0	0	0	0	5	0	5	5	(s)
Netherlands Antilles	0	0	0	0	0	40	0	0	192	0	89	320	320	2
Norway	0	0	0	0	0	0	0	0	0	0	0	0	0	0
People's Republic of China	0	0	494	4,374	599	0	0	0	0	347	3	5,817	5,817	27
Puerto Rico	0	0	0	0	0	0	0	239	0	0	50	288	288	1
Romania	0	0	0	222	0	0	0	0	0	0	0	222	222	1
United Kingdom	0	0	0	0	0	0	0	0	0	(s)	0	(s)	(s)	(s)
Other Western Hemisphere	0	0	0	0	0	0	0	318	0	0	0	318	318	1
Other Eastern Hemisphere	1,404	(s)	1,032	215	638	197	0	195	1,314	81	803	4,475	5,879	28
Subtotal Other	10,619	3,066	1,676	4,811	2,704	317	(s)	1,045	1,834	588	1,060	17,102	27,721	130
Total Imports	43,344	3,066	4,258	4,811	4,016	712	(s)	1,313	3,107	1,055	1,061	23,399	66,743	313

[1] Includes crude oil imported for storage in the Strategic Petroleum Reserve
[2] Includes aviation gasoline, aviation blending components, waxes, asphalt, lubricants, pentanes plus, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products
(s) = Less than 500 barrels or less than 500 barrels per day
Note. Total may not equal sum of components due to independent rounding
Sources: See Explanatory Notes on Data Collection and Estimation

Table 20. Exports of Crude Oil and Petroleum Products by PAD District, July 1984
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) [1]	0	433	0	0	2,908	3,341
Natural Gas Liquids	67	551	658	0	130	1,406
Pentanes Plus	0	80	0	0	0	80
Liquefied Petroleum Gases	67	472	658	0	130	1,326
Ethane	(s)	160	0	0	0	160
Propane	37	135	630	0	52	855
Normal Butane	29	97	28	0	78	232
Isobutane	0	80	0	0	0	80
Finished Motor Gasoline	2	0	6	0	273	281
Naphtha-Type Jet Fuel	0	0	0	0	0	0
Kerosene-Type Jet Fuel	0	0	276	0	30	306
Kerosene	2	0	1	0	(s)	2
Distillate Fuel Oil	4	0	146	0	1,096	1,245
Residual Fuel Oil	200	0	1,222	0	1,637	3,060
Naphtha < 400 Deg for Petrochem. Feedstock	46	12	71	(s)	12	140
Other Oils > 400 Deg for Petrochem. Feedstock	1	77	245	0	(s)	323
Special Naphthas	5	5	33	0	(s)	43
Lubricants	69	26	301	2	33	431
Waxes	6	1	38	0	3	48
Petroleum Coke	28	602	2,587	0	2,688	5,905
Asphalt	1	32	14	(s)	1	48
Miscellaneous Products	16	1	26	(s)	4	48
Total Product Exports	445	1,308	5,624	2	5,906	13,285
Total Exports	445	1,740	5,624	2	8,814	16,626

[1] *Exports of crude oil are prohibited by law.* However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U S Territories (especially Puerto Rico and the Virgin Islands) to be refined there The Statistical Tracking Systems count these exchanges and shipments as imports and exports

(s) = *Less than 500 barrels or less than 500 barrels per day*

Note Total may not equal sum of components due to independent rounding

Source See Explanatory Notes on Data Collection and Estimation

Table 21. Year-to-Date Exports Of Crude Oil And Petroleum Products By PAD District, January - July 1984
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) [1]	0	3,056	(s)	0	36,277	39,333
Natural Gas Liquids	280	3,856	5,118	(s)	1,167	10,422
Pentanes Plus	0	573	0	0	0	573
Liquefied Petroleum Gases	280	3,283	5,118	(s)	1,167	9,849
Ethane	(s)	1,145	(s)	0	0	1,146
Propane	129	966	4,167	(s)	468	5,731
Normal Butane	151	599	951	(s)	699	2,400
Isobutane	0	573	0	0	0	573
Finished Motor Gasoline	132	4	298	0	737	1,171
Naphtha-Type Jet Fuel	(s)	0	175	0	0	175
Kerosene-Type Jet Fuel	176	139	431	0	329	1,075
Kerosene	16	0	3	0	(s)	19
Distillate Fuel Oil	421	56	2,480	(s)	6,821	9,778
Residual Fuel Oil	633	0	12,022	0	19,318	31,973
Naphtha < 400 Deg for Petrochem. Feedstock	402	65	797	6	162	1,432
Other Oils > 400 Deg for Petrochem. Feedstock	2	208	2,872	0	263	3,345
Special Naphthas	45	71	223	3	247	589
Lubricants	821	204	2,179	9	310	3,523
Waxes	34	4	215	0	25	278
Petroleum Coke	1,384	1,785	23,193	4	16,901	43,266
Asphalt	15	43	26	3	10	98
Miscellaneous Products	107	12	86	(s)	22	229
Total Product Exports	4,469	6,446	50,119	25	46,313	107,373
Total Exports	4,469	9,503	50,119	25	82,590	146,706

[1] Exports of crude oil are prohibited by law However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U S Territories (especially Puerto Rico and the Virgin Islands) to be refined there The Statistical Tracking Systems count these exchanges and shipments as imports and exports

(s) = Less than 500 barrels or less than 500 barrels per day

Note Total may not equal sum of components due to independent rounding

Sources See Explanatory Notes on Data Collection and Estimation

Table 22. Exports of Crude Oil and Petroleum Products by Destination, July 1984
(Thousand Barrels)

Destination	Crude Oil [1]	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt	Other[2]	Total	Total (Daily Average)
Argentina	0	0	0	276	0	0	(s)	32	1	(s)	0	0	309	10
Australia	0	1	269	0	(s)	0	(s)	8	(s)	94	(s)	22	395	13
Bahamas	0	21	1	0	0	0	0	2	0	0	0	(s)	24	1
Bahrain	0	0	0	0	0	0	(s)	(s)	0	0	0	(s)	1	(s)
Belgium & Luxembourg	0	1	0	0	0	0	(s)	1	(s)	795	0	(s)	798	26
Brazil	0	0	0	0	0	0	(s)	(s)	(s)	192	0	1	193	6
Cameroon	0	0	0	0	0	0	0	(s)	(s)	30	0	0	30	1
Canada	433	473	1	0	66	497	4	50	5	621	32	193	2,374	77
Chile	0	0	6	0	0	0	(s)	8	(s)	0	(s)	1	15	(s)
China (Taiwan)	0	(s)	0	0	235	487	(s)	10	(s)	1	(s)	2	736	24
Colombia	0	0	0	0	0	0	2	5	1	(s)	0	2	10	(s)
Costa Rica	0	0	(s)	0	0	0	3	7	(s)	0	0	1	11	(s)
Denmark	0	(s)	0	0	0	0	0	(s)	(s)	141	0	(s)	142	5
Dominican Republic	0	60	0	0	0	0	(s)	2	0	32	0	1	95	3
Ecuador	0	0	0	0	0	0	(s)	(s)	(s)	0	0	2	2	(s)
Egypt	0	0	0	0	(s)	0	0	1	0	0	0	(s)	1	(s)
El Salvador	0	0	0	0	0	0	(s)	1	(s)	0	0	(s)	1	(s)
Finland	0	0	0	0	0	0	0	(s)	(s)	0	0	(s)	(s)	(s)
France	0	(s)	0	0	(s)	274	0	(s)	1	560	0	46	902	29
French Pacific Isl	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Ghana	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Guatemala	0	79	0	0	0	0	(s)	3	1	0	0	1	84	3
Honduras	0	(s)	0	0	0	0	1	8	(s)	0	0	(s)	9	(s)
Hong Kong	0	0	0	0	0	0	0	1	(s)	0	(s)	(s)	1	(s)
India	0	0	0	0	0	0	0	(s)	(s)	0	0	0	(s)	(s)
Indonesia	0	0	0	0	0	0	0	2	(s)	91	(s)	(s)	93	3
Iran	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Israel	0	0	0	0	0	0	(s)	(s)	0	(s)	0	4	4	(s)
Italy	0	(s)	0	0	0	0	3	1	(s)	563	(s)	114	680	22
Ivory Coast	0	0	0	0	0	0	0	13	0	0	0	0	13	(s)
Jamaica	0	21	0	0	0	0	0	15	0	0	0	1	37	1
Japan	0	1	(s)	0	797	482	11	6	2	1,305	(s)	42	2,646	85
Jordan	0	0	0	0	0	0	0	1	0	0	0	(s)	1	(s)
Korea, Republic of	0	1	0	0	0	275	(s)	6	(s)	418	(s)	6	705	23
Kuwait	0	0	0	0	0	0	0	1	0	0	0	(s)	2	(s)
Lebanon	0	0	0	0	0	0	0	2	0	0	0	0	2	(s)
Liberia	0	(s)	0	0	0	0	0	0	0	0	0	0	(s)	(s)
Malaysia	0	0	0	0	0	0	0	(s)	(s)	0	(s)	(s)	1	(s)
Mexico	0	620	4	30	0	0	7	27	9	16	0	4	717	23
Netherlands	0	2	0	0	0	0	5	8	(s)	355	(s)	105	474	15
Netherlands Antilles	0	(s)	0	0	145	200	0	(s)	0	0	0	(s)	345	11
New Zealand	0	0	0	0	0	0	2	6	(s)	(s)	0	(s)	8	(s)
Nicaragua	0	0	0	0	0	0	0	(s)	0	0	0	(s)	1	(s)
Nigeria	0	0	0	0	0	0	0	50	(s)	0	0	(s)	50	2
Norway	0	0	0	0	0	0	0	(s)	(s)	44	(s)	(s)	45	1
Pacific Trust Terr	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Panama	0	12	0	0	0	0	(s)	4	0	0	0	(s)	16	1
Peru	0	3	0	0	(s)	0	(s)	26	(s)	0	0	(s)	29	1
Philippines	0	0	0	0	0	0	(s)	(s)	(s)	0	0	(s)	1	(s)
Puerto Rico	464	9	1	0	0	(s)	1	14	2	0	0	17	508	16
Rep. of South Africa	0	1	0	0	0	0	(s)	13	13	64	(s)	1	92	3
Saudi Arabia	0	6	0	0	0	(s)	(s)	6	(s)	0	0	1	13	(s)

See footnotes at end of table

Table 22. Exports of Crude Oil and Petroleum Products by Destination, July 1984
(Thousand Barrels)
(continued)

Destination	Crude Oil [1]	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt	Other[2]	Total	Total (Daily Average)
Singapore	0	0	0	0	0	0	(s)	1	(s)	23	(s)	(s)	24	1
Spain	0	1	0	0	0	0	0	6	(s)	255	0	(s)	262	8
Surinam	0	0	0	0	0	0	0	6	0	10	0	(s)	16	1
Sweden	0	0	0	0	0	0	0	1	(s)	1	0	1	3	(s)
Switzerland	0	0	0	0	0	0	0	1	(s)	0	0	(s)	1	(s)
Thailand	0	0	0	0	0	0	(s)	1	(s)	0	0	1	2	(s)
Trinidad and Tobago	0	(s)	0	0	0	0	0	1	(s)	0	(s)	(s)	1	(s)
Turkey	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
United Arab Emirates	0	0	0	0	0	0	0	(s)	0	0	0	1	1	(s)
United Kingdom	0	1	0	0	1	294	0	2	(s)	0	14	1	313	10
U.S.S.R.	0	0	0	0	0	0	0	57	0	0	0	0	57	2
Uruguay	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Venezuela	0	(s)	0	0	0	0	3	2	(s)	92	0	4	102	3
Virgin Islands	1,723	(s)	0	0	0	350	0	(s)	0	0	0	(s)	2,073	67
West Germany	0	(s)	0	0	0	0	0	7	12	183	0	11	214	7
Yugoslavia	0	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)
Other	721	12	0	0	1	200	(s)	6	(s)	(s)	0	4	944	30
Total	3,341	1,326	281	306	1,245	3,060	43	431	48	5,905	48	593	16,626	536

[1] Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

[2] Includes pentanes plus, kerosene, naphtha less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.

(s) = Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - July 1984
(Thousand Barrels)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt	Other2	Total	Total (Daily Average)
Argentina	0	(s)	0	431	0	0	4	104	2	1	0	159	701	3
Australia	0	5	269	0	1	800	26	41	1	984	1	89	2,218	10
Bahamas	0	67	6	(s)	535	859	0	11	(s)	0	0	2	1,480	7
Bahrain	0	0	0	0	(s)	0	(s)	1	0	229	0	1	231	1
Belgium & Luxembourg	0	7	(s)	0	0	0	3	55	1	4,762	(s)	4	4,833	23
Brazil	0	1	0	0	0	0	7	9	(s)	260	0	8	285	1
Cameroon	0	0	0	0	0	0	0	(s)	(s)	90	0	(s)	91	(s)
Canada	3,056	3,298	128	220	1,465	1,754	85	480	19	3,314	56	1,035	14,912	70
Chile	0	(s)	52	17	112	31	2	76	(s)	1	2	4	297	1
China (Taiwan)	0	1	0	0	635	3,550	1	69	1	93	1	8	4,358	20
Colombia	0	4	0	0	0	0	5	32	61	1	0	7	108	1
Costa Rica	0	49	(s)	0	0	0	15	31	(s)	22	10	7	133	1
Denmark	0	1	0	0	(s)	0	0	2	1	513	0	1	517	2
Dominican Republic	0	259	0	0	0	0	(s)	7	1	64	0	3	334	2
Ecuador	0	351	25	0	332	(s)	3	5	1	0	1	6	725	3
Egypt	0	1	0	0	(s)	0	(s)	12	(s)	0	0	1	15	(s)
El Salvador	0	1	0	0	0	0	1	29	(s)	0	0	3	34	(s)
Finland	0	0	0	0	0	0	0	3	(s)	0	0	2	5	(s)
France	0	38	1	0	1	678	(s)	9	10	3,916	0	790	5,443	26
French Pacific Isl	0	0	0	0	0	350	0	2	0	0	(s)	0	351	2
Ghana	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Greece	0	2	0	0	(s)	0	(s)	2	(s)	153	0	1	159	1
Guatemala	0	358	0	0	0	0	4	22	3	0	(s)	4	391	2
Guinea	0	(s)	0	0	0	358	(s)	5	0	0	0	(s)	364	2
Honduras	0	2	(s)	0	(s)	0	4	37	(s)	(s)	(s)	2	47	(s)
Hong Kong	0	1	0	0	0	1,394	2	9	1	0	1	4	1,412	7
India	0	0	0	0	(s)	0	0	17	(s)	38	(s)	27	83	(s)
Indonesia	0	1	0	0	(s)	0	(s)	22	(s)	266	(s)	8	296	1
Iran	0	0	0	0	0	0	1	1	0	0	0	0	1	(s)
Israel	0	1	0	0	0	0	2	1	(s)	(s)	0	8	12	(s)
Italy	0	156	0	0	(s)	2,948	5	5	4	5,494	(s)	927	9,540	45
Ivory Coast	0	0	0	0	174	156	0	26	0	0	(s)	(s)	357	2
Jamaica	0	175	25	0	0	330	(s)	72	(s)	0	(s)	7	610	3
Japan	0	7	(s)	0	2,335	5,512	307	171	16	8,973	(s)	282	17,605	83
Jordan	0	(s)	0	0	0	0	(s)	5	0	(s)	0	(s)	6	(s)
Korea, Republic of	0	4	0	0	668	1,339	1	30	3	768	(s)	225	3,037	14
Kuwait	0	3	(s)	0	0	0	(s)	12	0	(s)	0	1	16	(s)
Lebanon	0	0	0	0	0	0	0	4	0	0	0	(s)	4	(s)
Liberia	0	1	0	0	0	251	0	2	(s)	0	(s)	(s)	253	1
Malaysia	0	(s)	0	0	(s)	0	(s)	4	(s)	0	(s)	1	6	(s)
Mexico	0	3,945	26	248	(s)	0	19	488	53	239	1	49	5,069	24
Netherlands	0	142	0	0	0	577	46	49	3	4,620	(s)	579	6,015	28
Netherlands Antilles	0	3	51	128	877	2,012	(s)	2	0	0	0	(s)	3,073	14
New Zealand	0	(s)	443	0	301	0	3	9	(s)	276	(s)	6	1,039	5
Nicaragua	0	(s)	0	0	0	0	3	23	0	0	0	3	30	(s)
Nigeria	0	(s)	0	0	0	0	(s)	101	(s)	0	(s)	1	103	(s)
Norway	0	(s)	0	0	(s)	0	0	2	(s)	759	(s)	1	762	4
Pacific Trust Terr.	0	1	0	0	0	0	0	(s)	0	0	0	(s)	1	(s)
Panama	0	88	113	0	1,154	1,047	3	40	(s)	28	(s)	2	2,476	12
Peru	0	3	0	0	576	0	(s)	92	(s)	0	0	2	673	3
Philippines	0	3	0	0	0	0	2	9	1	0	0	55	71	(s)
Puerto Rico	5,267	69	1	(s)	(s)	189	4	116	10	(s)	1	143	5,800	27
Rep of South Africa	0	2	0	0	(s)	0	(s)	67	51	205	1	288	614	3

See footnotes at end of table.

Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - July 1984
(Thousand Barrels)
(continued)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt	Other2	Total	Total (Daily Average)
Saudi Arabia	0	55	0	0	(s)	(s)	1	134	(s)	0	0	23	213	1
Singapore	0	12	0	0	100	1,565	14	63	(s)	23	(s)	10	1,786	8
Spain	0	4	0	0	349	1,308	0	379	1	4,290	0	253	6,584	31
Surinam	0	0	0	0	0	0	0	11	0	45	0	1	57	(s)
Sweden	0	2	0	0	0	0	0	10	(s)	315	(s)	5	332	2
Switzerland	0	2	0	0	0	0	(s)	4	1	0	0	3	10	(s)
Thailand	0	(s)	30	0	0	0	1	36	(s)	(s)	0	63	131	1
Trinidad and Tobago	0	41	0	206	(s)	0	5	9	(s)	0	(s)	1	262	1
Turkey	0	(s)	0	0	(s)	0	(s)	1	(s)	302	0	174	478	2
United Arab Emirates	0	1	0	0	0	0	(s)	56	0	181	0	22	261	1
United Kingdom	0	43	(s)	0	8	1,381	1	33	2	67	15	17	1,566	7
U.S.S.R.	0	0	0	0	0	0	0	224	0	237	0	0	461	2
Uruguay	0	(s)	0	0	0	0	(s)	5	(s)	0	(s)	1	6	(s)
Venezuela	(s)	524	0	0	0	0	6	11	3	559	(s)	12	1,116	5
Virgin Islands	25,534	14	0	0	0	3,214	0	(s)	0	0	0	(s)	28,763	135
West Germany	0	(s)	0	0	0	0	(s)	71	24	661	(s)	94	851	4
Yugoslavia	0	0	0	0	0	0	0	(s)	(s)	341	0	(s)	341	2
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	39,333	9,849	1,171	1,249	9,778	31,973	589	3,523	278	43,266	98	5,597	146,706	689

1 Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.
2 Includes pentanes plus, kerosene, naphtha less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products
(s) = Less than 500 barrels or less than 500 barrels per day.
Note: Total may not equal sum of components due to independent rounding
Sources: See Explanatory Notes on Data Collection and Estimation

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, July 1984
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist IV	PAD Dist. V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks	Okla., Kans., Mo	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No La., Ark	New Mexico	Total	Rocky Mt	West Coast	
Crude Oil (incl. lease condensate)																	
Refinery	—	—	14,264	—	—	—	—	15,243	—	—	—	—	—	51,039	2,380	26,299	109,225
Tank Farms and Pipelines	—	—	1,443	—	—	—	—	61,863	—	—	—	—	—	95,417	9,393	28,181	196,297
Leases	—	—	62	—	—	—	—	1,565	—	—	—	—	—	16,797	1,298	1,616	21,338
Strategic Petroleum Reserve[1]	—	—	0	—	—	—	—	0	—	—	—	—	—	423,904	0	0	423,904
Alaskan In-Transit	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	21,366	21,366
Total	—	—	15,769	—	—	—	—	78,671	—	—	—	—	—	587,157	13,071	77,462	772,130
Total Stocks, All Oils (excl. Crude Oil)																	
Refinery	37,857	2,965	40,822	942	39,567	6,782	14,699	61,990	9,398	72,858	43,776	5,167	1,716	132,915	12,831	62,765	311,323
Bulk Terminal	—	—	115,660	—	—	—	—	83,674	—	—	—	—	—	85,795	3,289	24,277	312,695
Pipeline	—	—	26,833	—	—	—	—	33,899	—	—	—	—	—	38,876	2,730	4,734	107,072
Natural Gas Processing Plant	231	35	266	0	639	76	2,079	2,794	1,600	4,518	468	84	211	6,881	241	167	10,349
Total	—	—	183,581	—	—	—	—	182,357	—	—	—	—	—	264,467	19,091	91,943	741,439
Pentanes Plus																	
Refinery	13	0	13	0	34	30	121	185	108	221	110	17	14	470	21	17	706
Bulk Terminal	—	—	20	—	—	—	—	2,323	—	—	—	—	—	3,869	0	7	6,219
Pipeline	—	—	0	—	—	—	—	566	—	—	—	—	—	1,404	149	5	2,124
Natural Gas Processing Plant	4	4	8	0	54	23	352	429	431	683	197	41	26	1,378	85	20	1,920
Total	—	—	41	—	—	—	—	3,503	—	—	—	—	—	7,121	255	49	10,969
Liquefied Petroleum Gases																	
Refinery	810	10	820	216	2,086	208	538	3,048	187	1,016	1,660	41	27	2,931	366	762	7,927
Bulk Terminal	—	—	1,517	—	—	—	—	20,809	—	—	—	—	—	56,997	98	1,321	80,742
Pipeline	—	—	1,478	—	—	—	—	5,943	—	—	—	—	—	5,722	422	0	13,565
Natural Gas Processing Plant	227	31	258	0	582	53	1,727	2,362	1,020	3,833	271	41	185	5,350	150	147	8,267
Total	—	—	4,073	—	—	—	—	32,162	—	—	—	—	—	71,000	1,036	2,230	110,501
Ethane																	
Refinery	26	0	26	0	4	5	0	9	0	5	0	0	0	5	0	0	40
Bulk Terminal	—	—	0	—	—	—	—	2,190	—	—	—	—	—	13,001	0	0	15,191
Pipeline	—	—	0	—	—	—	—	1,665	—	—	—	—	—	1,914	129	0	3,708
Natural Gas Processing Plant	0	0	0	0	27	0	454	481	107	1,127	0	2	14	1,250	1	0	1,732
Total	—	—	26	—	—	—	—	4,345	—	—	—	—	—	16,170	130	0	20,671

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, July 1984 (Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist IV	PAD Dist V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Daks	Okla., Kans., Mo	Total	Texas Inland	Texas Gulf Coast	La Gulf Coast	No La., Ark	New Mexico	Total	Rocky Mt	West Coast	
Propane for Petrochemical Feedstock Use																	
Refinery	71	0	71	0	111	0	1	112	2	7	85	0	0	94	0	0	277
Total	—	—	71	—	—	—	—	112	—	—	—	—	—	94	0	0	277
Propane For Other Uses																	
Refinery	655	6	661	2	1,348	30	158	1,538	55	45	1,117	4	3	1 224	161	307	3,891
Bulk Terminal	—	—	1,163	—	—	—	—	15,105	—	—	—	—	—	26,919	97	400	43,684
Pipeline	—	—	1,344	—	—	—	—	3,106	—	—	—	—	—	2,608	169	0	7,227
Natural Gas Processing Plant	183	31	214	0	432	27	797	1,256	530	1,482	145	22	107	2,286	105	127	3,988
Total	—	—	3,382	—	—	—	—	21,005	—	—	—	—	—	33 037	532	834	58,790
Normal Butane For Petro. Feed Use																	
Refinery	0	0	0	0	0	45	0	45	0	11	0	1	0	12	4	1	62
Total	—	—	0	—	—	—	—	45	—	—	—	—	—	12	4	1	62
Normal Butane For Other Uses																	
Refinery	50	4	54	167	397	68	229	881	109	819	200	25	18	1,171	145	408	2,659
Bulk Terminal	—	—	335	—	—	—	—	2,423	—	—	—	—	—	11,400	1	715	14,874
Pipeline	—	—	116	—	—	—	—	794	—	—	—	—	—	750	81	0	1,741
Natural Gas Processing Plant	30	0	30	0	100	21	384	505	325	823	80	14	51	1,293	37	13	1,878
Total	—	—	535	—	—	—	—	4,603	—	—	—	—	—	14,614	264	1,136	21 152
Isobutane																	
Refinery	8	0	8	47	226	40	150	463	21	129	258	11	6	425	56	46	998
Bulk Terminal	—	—	19	—	—	—	—	1,091	—	—	—	—	—	5,677	0	206	6,993
Pipeline	—	—	18	—	—	—	—	378	—	—	—	—	—	450	43	0	889
Natural Gas Processing Plant	14	0	14	0	23	5	92	120	58	401	46	3	13	521	7	7	669
Total	—	—	59	—	—	—	—	2,052	—	—	—	—	—	7,073	106	259	9,549
Other Hydrocarbons and Alcohol																	
Refinery	122	0	122	0	137	0	1	138	1	88	4	0	0	93	0	5	358
Total	—	—	122	—	—	—	—	138	—	—	—	—	—	93	0	5	358
Unfinished Oils																	
Refinery																	
Naphthas and Lighter	3,479	201	3,680	48	2,695	109	1,099	3,951	745	8,076	4,847	250	45	13,963	505	4,749	26,848
Kerosene and Lighter Gas Oils	1,892	76	1,968	0	1,661	3	437	2,101	548	6,358	1,667	71	5	8,649	457	4,649	17,824
Heavy Gas Oils	4,969	234	5,203	120	3,941	634	1,810	6,505	629	10,318	5,619	101	179	16,846	835	9,821	39,210
Residuum	1,821	221	2,042	2	2,815	22	1,363	4,202	475	5,344	3,961	53	12	9,845	761	5,250	22,100
Total	12,161	732	12,893	170	11,112	768	4,709	16,759	2,397	30,096	16,094	475	241	49,303	2,558	24,469	105,982

See footnotes at end of table

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, July 1984 (Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Daks	Okla., Kans., Mo	Total	Texas Inland	Texas Gulf Coast	La Gulf Coast	No La., Ark.	New Mexico	Total	Rocky Mt	West Coast	
Motor Gasoline Blending Components																	
Refinery	5,703	95	5,798	36	5,215	650	1,267	7,168	1,135	8,172	5,957	128	314	15,706	1,874	7,201	37,747
Bulk Terminal	—	—	75	—	—	—	—	146	—	—	—	—	—	336	1	66	624
Pipeline	—	—	0	—	—	—	—	1	—	—	—	—	—	0	0	0	1
Total	—	—	5,873	—	—	—	—	7,315	—	—	—	—	—	16,042	1,875	7,267	38,372
Aviation Gasoline Blending Components																	
Refinery	0	0	0	0	55	0	31	86	0	15	162	0	0	177	0	27	290
Total	—	—	0	—	—	—	—	86	—	—	—	—	—	177	0	27	290
Total Finished Motor Gasoline																	
Refinery	5,299	312	5,611	137	6,179	1,001	2,549	9,866	2,302	8,625	5,289	1,551	226	17,993	2,445	8,073	43,988
Bulk Terminal	—	—	44,915	—	—	—	—	31,225	—	—	—	—	—	12,576	1,841	11,209	101,766
Pipeline	—	—	15,799	—	—	—	—	16,246	—	—	—	—	—	18,553	1,335	2,445	54,378
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6
Total	—	—	66,325	—	—	—	—	57,337	—	—	—	—	—	49,122	5,627	21,727	200,138
Finished Leaded Motor Gasoline																	
Refinery	1,941	191	2,132	72	2,691	433	1,473	4,669	1,270	3,557	1,880	314	121	7,142	1,621	3,675	19,239
Bulk Terminal	—	—	20,593	—	—	—	—	15,769	—	—	—	—	—	6,918	1,152	5,303	49,735
Pipeline	—	—	6,152	—	—	—	—	8,014	—	—	—	—	—	7,921	761	1,103	23,951
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
Total	—	—	28,877	—	—	—	—	28,452	—	—	—	—	—	21,981	3,539	10,081	92,930
Finished Unleaded Motor Gasoline																	
Refinery	3,358	121	3,479	65	3,488	568	1,076	5,197	1,032	5,068	3,409	1,237	105	10,851	824	4,398	24,749
Bulk Terminal	—	—	24,322	—	—	—	—	15,456	—	—	—	—	—	5 658	689	5,906	52,031
Pipeline	—	—	9,647	—	—	—	—	8,232	—	—	—	—	—	10,632	574	1,342	30,427
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total	—	—	37,448	—	—	—	—	28,885	—	—	—	—	—	27,141	2,088	11,646	107 208
Finished Aviation Gasoline																	
Refinery	39	0	39	0	88	0	12	100	90	339	155	0	0	584	37	221	981
Bulk Terminal	—	—	423	—	—	—	—	362	—	—	—	—	—	101	15	333	1,234
Pipeline	—	—	0	—	—	—	—	167	—	—	—	—	—	7	0	42	216
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	80	0	0	0	0	80	0	0	80
Total	—	—	462	—	—	—	—	629	—	—	—	—	—	772	52	596	2,511

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, July 1984 (Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Daks	Okla., Kans., Mo	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Naphtha-Type Jet Fuel																	
Refinery	275	36	311	0	477	96	174	747	304	852	364	153	219	1,892	251	766	3,967
Bulk Terminal	—	—	349	—	—	—	—	642	—	—	—	—	—	172	10	515	1,688
Pipeline	—	—	178	—	—	—	—	138	—	—	—	—	—	467	86	334	1,203
Total	—	—	838	—	—	—	—	1,527	—	—	—	—	—	2,531	347	1,615	6,858
Kerosene-Type Jet Fuel																	
Refinery	1,169	0	1,169	29	1,455	173	239	1,896	298	3,548	2,701	3	65	6,615	423	3,560	13,663
Bulk Terminal	—	—	4,247	—	—	—	—	4,503	—	—	—	—	—	1,959	289	1,707	12,705
Pipeline	—	—	3,313	—	—	—	—	2,420	—	—	—	—	—	3,941	174	487	10,335
Total	—	—	8,729	—	—	—	—	8,819	—	—	—	—	—	12,515	886	5,754	36,703
Kerosene																	
Refinery	380	99	479	0	379	45	263	687	95	552	681	82	120	1,530	0	214	2,910
Bulk Terminal	—	—	2,947	—	—	—	—	737	—	—	—	—	—	612	37	39	4,372
Pipeline	—	—	31	—	—	—	—	236	—	—	—	—	—	476	0	0	743
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	3
Total	—	—	3,457	—	—	—	—	1,660	—	—	—	—	—	2,621	37	253	8,028
Distillate Fuel Oils																	
Refinery	5,075	345	5,420	24	6,391	1,579	3,079	11,073	1,025	8,370	4,423	704	270	14,792	2,299	5,222	38,806
Bulk Terminal	—	—	33,817	—	—	—	—	16,958	—	—	—	—	—	5,358	771	5,036	61,940
Pipeline	—	—	6,029	—	—	—	—	8,127	—	—	—	—	—	8,022	564	1,017	23,759
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	2
Total	—	—	45,266	—	—	—	—	36,158	—	—	—	—	—	28,174	3,634	11,275	124,507
Residual Fuel Oils																	
Refinery	2,536	91	2,627	19	1,526	262	199	2,006	360	3,895	2,459	136	18	6,868	563	7,636	19,700
Bulk Terminal	—	—	22,061	—	—	—	—	1,519	—	—	—	—	—	2,940	0	2,822	29,342
Pipeline	—	—	5	—	—	—	—	0	—	—	—	—	—	0	0	158	163
Total	—	—	24,693	—	—	—	—	3,525	—	—	—	—	—	9,808	563	10,616	49,205
Naphtha < 400 Deg. Petro. Feedstock																	
Refinery	257	0	257	0	106	0	52	158	62	774	471	42	0	1,349	0	77	1,841
Total	257	0	257	0	106	0	52	158	62	774	471	42	0	1,349	0	77	1,841
Other Oils > 400 Deg. Petro. Feedstock																	
Refinery	5	0	5	0	28	0	0	28	211	998	207	0	0	1,416	2	152	1,603
Total	5	0	5	0	28	0	0	28	211	998	207	0	0	1,416	2	152	1,603

See footnotes at end of table

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, July 1984 (Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist IV	PAD Dist V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Daks	Okla., Kans., Mo	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Special Naphthas																	
Refinery	89	30	119	0	185	0	151	336	38	1,079	86	138	0	1,341	10	234	2,040
Bulk Terminal	—	—	615	—	—	—	—	111	—	—	—	—	—	27	0	36	789
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	60	0	0	0	0	60	0	0	60
Total	—	—	734	—	—	—	—	447	—	—	—	—	—	1,428	10	270	2,889
Lubricants																	
Refinery	1,077	976	2,053	0	794	0	450	1,244	33	2,849	1,431	624	0	4,937	66	476	8 776
Bulk Terminal	—	—	1,167	—	—	—	—	769	—	—	—	—	—	271	2	755	2,964
Total	—	—	3,220	—	—	—	—	2,013	—	—	—	—	—	5,208	68	1,231	11,740
Waxes																	
Refinery	4	83	87	0	33	0	27	60	13	188	132	51	0	384	0	43	574
Total	—	—	87	—	—	—	—	60	—	—	—	—	—	384	0	43	574
Petroleum Coke																	
Refinery	665	0	665	0	307	463	115	885	0	402	919	205	0	1,526	184	1,643	4 903
Total	665	0	665	0	307	463	115	885	0	402	919	205	0	1,526	184	1,643	4,903
Asphalt and Road Oil																	
Refinery	1,945	130	2,075	311	2,846	1,503	703	5,363	699	408	438	732	202	2,479	1,721	1,865	13,503
Bulk Terminal	—	—	3,358	—	—	—	—	3,543	—	—	—	—	—	514	223	260	7,898
Total	—	—	5,433	—	—	—	—	8,906	—	—	—	—	—	2,993	1,944	2,125	21,401
Miscellaneous Products																	
Refinery	233	26	259	0	134	4	19	157	40	371	33	85	0	529	11	102	1,058
Bulk Terminal	—	—	149	—	—	—	—	27	—	—	—	—	—	63	2	171	412
Pipeline	—	—	0	—	—	—	—	55	—	—	—	—	—	284	0	246	585
Natural Gas Processing Plant	0	0	0	0	3	0	0	3	6	0	0	2	0	8	0	0	11
Total	—	—	408	—	—	—	—	242	—	—	—	—	—	884	13	519	2,066
Total Stocks, All Oils	—	—	199,350	—	—	—	—	261,028	—	—	—	—	—	851,624	32,162	169,405	1,513,569

1 Includes 33,879 thousand barrels of domestic crude oil.
Source: See Explanatory Notes on Data Collection and Estimation.
— Not Applicable.

5. [illegible] and Bulk Terminal Stocks of Selected Petroleum Products by State, July 1984
(Thousand Barrels)

State	Leaded Motor Gasoline	Unleaded Motor Gasoline	Kerosene	Distillate Fuel Oil	Residual Fuel Oil
PAD District I Total	**22,725**	**27,801**	**3,426**	**39,237**	**24,688**
Connecticut	623	731	66	1,699	325
Delaware, D C , Maryland	921	2,045	173	3,023	2,433
Florida	2,829	3,676	223	1,798	1,376
Georgia	1,399	1,587	84	1,369	254
Maine	370	491	72	1 095	563
Massachusetts	1,229	1,200	62	2,767	1,902
New Hampshire, Vermont	40	36	w	413	156
New Jersey	3,291	5,547	548	10,059	10,219
New York	4,122	3,228	336	5,371	3,128
North Carolina	1,525	1,615	584	1,468	685
Pennsylvania	2,953	4,156	705	5,117	1,940
Rhode Island	367	352	w	1 165	96
South Carolina	948	1,001	196	1,229	535
Virginia	1,821	1 899	334	2,408	1,024
West Virginia	287	237	9	256	52
PAD District II Total	**20,438**	**20,653**	**1,424**	**28,031**	**3,525**
Illinois	3,771	4 388	199	5,676	865
Indiana	2,824	2,617	126	3,932	450
Iowa	933	674	w	1,399	w
Kansas	1 372	1,296	16	1,814	81
Kentucky	964	1,224	115	1,500	213
Michigan	2,082	2 286	140	2,460	418
Minnesota	807	800	w	1,575	268
Missouri	962	659	w	684	w
Nebraska	328	118	0	189	0
North & South Dakota	275	318	0	1,053	w
Ohio	2,472	3,153	394	2,935	399
Oklahoma	1,117	838	249	2,037	162
Tennessee	1,370	1,276	102	1,100	211
Wisconsin	1,141	1,004	w	1,657	148
PAD District III Total	**14,060**	**16,509**	**2,142**	**20,150**	**9,808**
Alabama	848	818	99	951	459
Arkansas	121	235	w	232	48
Louisiana	2,003	3,370	691	4,477	3,648
Mississippi	913	2,208	24	1,308	504
New Mexico	259	210	w	338	18
Texas	9,916	9,668	1,204	12,844	5,131
PAD District IV Total	**2,773**	**1,513**	**37**	**3,070**	**563**
Colorado	722	447	0	448	125
Idaho	298	137	0	240	0
Montana	644	296	w	958	95
Utah	326	187	0	612	213
Wyoming	783	446	w	812	130
PAD District V Total	**8,978**	**10,304**	**253**	**10,258**	**10,458**
Alaska	426	256	w	995	w
Arizona	379	355	w	256	0
California	5,172	6,960	158	5,050	8,039
Hawaii	278	201	0	220	w
Nevada	133	185	w	156	w
Oregon	776	696	w	920	394
Washington	1,814	1,651	w	2,661	1,346
United States Total	**68,974**	**76,780**	**7,282**	**100,746**	**49,042**

w = Withheld to avoid disclosure of individual company data.
Source: See Explanatory Notes on Data Collection and Estimation

Table 26. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge between PAD Districts, July 1984
(Thousand Barrels)

Commodity	From I to			From II to				From III to				From IV to			From V to			
	II	III	V	I	III	IV	V	I	II	IV	V	II	III	V	I	II	III	IV
Crude Oil (Tanker and Barge only)	0	359	0	0	0	0	0	211	1,709	0	0	0	0	0	2,769	0	16,733	0
Petroleum Products	9,560	239	0	3,236	8,950	2,091	0	72,875	31,743	0	1,630	1,804	896	1,019	0	0	58	0
Pentanes Plus	0	0	0	0	643	0	0	0	1,410	0	0	94	154	0	0	0	0	0
Liquefied Petroleum Gases	0	0	0	796	5,254	39	0	1,137	6,810	0	0	681	742	0	0	0	0	0
Unfinished Oils	0	0	0	0	0	0	0	403	413	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	252	0	0	0	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	6,553	0	0	1,672	1,807	1,216	0	47,200	13,225	0	784	549	0	730	0	0	0	0
Finished Leaded Motor Gasoline	3,285	0	0	549	935	640	0	16,324	6,409	0	386	334	0	324	0	0	0	0
Finished Unleaded Motor Gasoline	3,268	0	0	1,123	872	576	0	30,876	6,816	0	398	215	0	406	0	0	0	0
Finished Aviation Gasoline	10	0	0	0	0	14	0	151	228	0	0	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	138	41	0	0	170	0	0	343	34	0	188	72	0	52	0	0	0	0
Kerosene-Type Jet Fuel	176	0	0	112	50	596	0	7,760	3,427	0	206	9	0	72	0	0	0	0
Kerosene	5	0	0	0	0	0	0	56	1	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil	2,577	0	0	265	599	226	0	13,833	5,126	0	356	399	0	165	0	0	0	0
Residual Fuel Oil	0	0	0	89	304	0	0	523	10	0	0	0	0	0	0	0	0	0
Naphtha and Other Oils for Petro. Feedstock	50	0	0	18	0	0	0	50	19	0	0	0	0	0	0	0	0	0
Special Naphthas	0	0	0	0	0	0	0	326	87	0	55	0	0	0	0	0	0	0
Lubricants	12	25	0	52	39	0	0	626	230	0	41	0	0	0	0	0	0	0
Waxes	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	173	0	175	0	0	0	84	723	0	0	0	0	0	0	0	0	0
Miscellaneous Products	39	0	0	57	84	0	0	118	0	0	0	0	0	0	0	0	58	0
Total All Products	9,560	598	0	3,236	8,950	2,091	0	73,086	33,452	0	1,630	1,804	896	1,019	2,769	0	16,791	0

Source. See Explanatory Notes on Data Collection and Estimation

Table 27. Movements of Petroleum Products by Pipeline between PAD Districts, July 1984
(Thousand Barrels)

Commodity	From I to		From II to			From III to				From IV to			From V to	
	II	III	I	III	IV	I	II	IV	V	II	III	V	III	IV
Pentanes Plus	0	0	0	643	0	0	1,410	0	0	94	154	0	0	0
Liquefied Petroleum Gases	0	0	796	5,254	39	1,073	6,810	0	0	681	742	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	4,863	0	1,416	1,800	1,216	38,238	12,511	0	784	549	0	730	0	0
Finished Leaded Motor Gasoline	2,408	0	449	935	640	13,374	6,133	0	386	334	0	324	0	0
Finished Unleaded Motor Gasoline	2,455	0	967	865	576	24,864	6,378	0	398	215	0	406	0	0
Finished Aviation Gasoline	10	0	0	0	14	37	190	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	0	0	0	170	0	343	34	0	188	72	0	52	0	0
Kerosene-Type Jet Fuel	84	0	112	50	596	5,754	3,241	0	206	9	0	72	0	0
Kerosene	5	0	0	0	0	49	1	0	0	0	0	0	0	0
Distillate Fuel Oil	1,679	0	214	599	226	11,234	4,596	0	356	399	0	165	0	0
Residual Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	0	0	40	0	0	0	0	0	0	0	0	0	0	0
Total	6,641	0	2,578	8,516	2,091	56,728	28,793	0	1,534	1,804	896	1,019	0	0

Source: See Explanatory Notes on Data Collection and Estimation

Table 28. Movements of Crude Oil and Petroleum Products by Tanker and Barge between PAD Districts, July 1984
(Thousand Barrels)

Commodity	From I to			From II to			From III to						From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	V	I	II	III
Crude Oil	0	359	0	0	0	0	211	0	211	0	1,709	0	2,769	0	16,733
Petroleum Products	2,919	239	0	658	434	0	16,147	474	3,779	11,894	2,950	96	0	0	58
Liquefied Petroleum Gases	0	0	0	0	0	0	64	0	0	64	0	0	0	0	0
Unfinished Oils	0	0	0	0	0	0	403	0	331	72	413	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	252	0	0	252	0	0	0	0	0
Finished Motor Gasoline	1,690	0	0	256	7	0	8,962	173	1,588	7,201	714	0	0	0	0
Finished Leaded Motor Gasoline	877	0	0	100	0	0	2,950	33	340	2,577	276	0	0	0	0
Finished Unleaded Motor Gasoline	813	0	0	156	7	0	6,012	140	1,248	4,624	438	0	0	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	114	0	68	46	38	0	0	0	0
Naphtha-Type Jet Fuel	138	41	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel	92	0	0	0	0	0	2,006	77	557	1,372	186	0	0	0	0
Kerosene	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0
Distillate Fuel Oil	898	0	0	51	0	0	2,599	16	484	2,099	530	0	0	0	0
Residual Fuel Oil	0	0	0	89	304	0	523	184	0	339	10	0	0	0	0
Naphtha and Other Oils for Petro Feed Use	50	0	0	18	0	0	50	0	0	50	19	0	0	0	0
Special Naphthas	0	0	0	0	0	0	326	24	163	139	87	55	0	0	0
Lubricants	12	25	0	52	39	0	626	0	443	183	230	41	0	0	0
Waxes	0	0	0	0	0	0	13	0	13	0	0	0	0	0	0
Asphalt and Road Oil	0	173	0	175	0	0	84	0	14	70	723	0	0	0	0
Miscellaneous Products	39	0	0	17	84	0	118	0	118	0	0	0	0	0	58
Total	2,919	598	0	658	434	0	16,358	474	3,990	11,894	4,659	96	2,769	0	16 791

Source See Explanatory Notes on Data Collection and Estimation

Table 29. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge between PAD Districts, July 1984
(Thousand Barrels)

Commodity	PAD District I			PAD District II			PAD District III			PAD District IV			PAD District V		
	Receipts into PADD I	Shipments from PADD I	Net Receipts PADD I	Receipts into PADD II	Shipments from PADD II	Net Receipts PADD II	Receipts into PADD III	Shipments from PADD III	Net Receipts PADD III	Receipts into PADD IV	Shipments from PADD VI	Net Receipts PADD IV	Receipts into PADD V	Shipments from PADD V	Net Receipts PADD V
Crude Oil (Tanker and Barge only)	2,980	359	2,621	1,709	0	1,709	17,092	1,920	15,172	0	0	0	0	19,502	-19,502
Petroleum Products	76,111	9,799	66,312	43,107	14,277	28,830	10,143	106,248	-96,105	2,091	3,719	-1,628	2,649	58	2,591
Pentanes Plus	0	0	0	1,504	643	861	797	1,410	-613	0	248	-248	0	0	0
Liquefied Petroleum Gases	1,933	0	1,933	7,491	6,089	1,402	5,996	7,947	-1,951	39	1,423	-1,384	0	0	0
Unfinished Oils	403	0	403	413	0	413	0	816	-816	0	0	0	0	0	0
Motor Gasoline Blending Components	252	0	252	0	0	0	0	252	-252	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	48,872	6,553	42,319	20,327	4,695	15,632	1,807	61,209	-59,402	1,216	1,279	-63	1,514	0	1,514
Finished Leaded Motor Gasoline	16,873	3,285	13,588	10,028	2,124	7,904	935	23,119	-22,184	640	658	-18	710	0	710
Finished Unleaded Motor Gasoline	31,999	3,268	28,731	10,299	2,571	7,728	872	38,090	-37,218	576	621	-45	804	0	804
Finished Aviation Gasoline	151	10	141	238	14	224	0	379	-379	14	0	14	0	0	0
Naphtha-Type Jet Fuel	343	179	164	244	170	74	211	565	-354	0	124	-124	240	0	240
Kerosene-Type Jet Fuel	7,872	176	7,696	3,612	758	2,854	50	11,393	-11,343	596	81	515	278	0	278
Kerosene	56	5	51	6	0	6	0	57	-57	0	0	0	0	0	0
Distillate Fuel Oil	14,098	2,577	11,521	8,102	1,090	7,012	599	19,315	-18,716	226	564	-338	521	0	521
Residual Fuel Oil	612	0	612	10	393	-383	304	533	-229	0	0	0	0	0	0
Naphtha and Other Oils for Petro Feedstock Use	68	50	18	69	18	51	0	69	-69	0	0	0	0	0	0
Special Naphthas	326	0	326	87	0	87	0	468	-468	0	0	0	55	0	55
Lubricants	678	37	641	242	91	151	64	897	-833	0	0	0	41	0	41
Waxes	13	0	13	0	0	0	0	13	-13	0	0	0	0	0	0
Asphalt and Road Oil	259	173	86	723	175	548	173	807	-634	0	0	0	0	0	0
Miscellaneous Products	175	39	136	39	141	-102	142	118	24	0	0	0	0	58	-58
Total All Products	79,091	10,158	68,933	44,816	14,277	30,539	27,235	108,168	-80,933	2,091	3,719	-1,628	2,649	19,560	-16,911

Source. See Explanatory Notes on Data Collection and Estimation.

Table 30. Production of Residual Fuel Oil by Sulfur Content, July 1984
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist IV	PAD Dist V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La Gulf Coast	No La., Ark.	New Mexico	Total	Rocky Mt	West Coast	
Residual Fuel Oil	3,100	73	3,173	54	1,441	238	512	2,245	693	4,647	2,431	245	13	8,029	333	10,781	24,561
0.00 to 0.30% Sulfur	713	14	727	0	92	8	1	101	82	354	461	87	8	992	90	374	2,284
0.31 to 1.00% Sulfur	2,005	3	2,008	25	372	0	367	764	480	1,094	706	100	0	2,380	98	3,027	8,277
Greater Than 1.00% Sulfur	382	56	438	29	977	230	144	1,380	131	3,199	1,264	58	5	4,657	145	7,380	14,000

Source: See Explanatory Notes on Data Collection and Estimation.

Table 31. Stocks of Residual Fuel Oil by Sulfur Content, July 1984
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist IV	PAD Dist V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Daks	Okla., Kans., Mo	Total	Texas Inland	Texas Gulf Coast	La Gulf Coast	No La., Ark	New Mexico	Total	Rocky Mt	West Coast	
Residual Fuel Oil — 0.00 to 0.30% Sulfur																	
Refinery	479	25	504	0	37	6	1	44	104	44	316	10	10	484	110	276	1,418
Bulk Terminal	—	—	3,795	—	—	—	—	4	—	—	—	—	—	107	0	224	4,130
Total	—	—	4,299	—	—	—	—	48	—	—	—	—	—	591	110	500	5,548
Residual Fuel Oil — 0.31 to 1.00% Sulfur																	
Refinery	1,437	6	1,443	15	614	0	131	760	89	780	1,232	67	0	2,168	149	2,106	6,626
Bulk Terminal	—	—	7,200	—	—	—	—	336	—	—	—	—	—	1,085	0	715	9,336
Total	—	—	8,643	—	—	—	—	1,096	—	—	—	—	—	3,253	149	2,821	15,962
Residual Fuel Oil — Greater than 1.00% Sulfur																	
Refinery	620	60	680	4	875	256	67	1,202	167	3,071	911	59	8	4,216	304	5,254	11,656
Bulk Terminal	—	—	11,066	—	—	—	—	1,179	—	—	—	—	—	1,748	0	1,883	15,876
Total	—	—	11,746	—	—	—	—	2,381	—	—	—	—	—	5,964	304	7,137	27,532

Source See Explanatory Notes on Data Collection and Estimation
— Not Applicable

Table 32. Movements of Residual Fuel Oil by Tanker and Barge between PAD Districts, by Sulfur Content, July 1984
(Thousand Barrels)

Commodity	From I to			From II to			From III to						From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	V	I	II	III
Residual Fuel Oil	0	0	0	89	304	0	523	184	0	339	10	0	0	0	0
0.00 to 0.30% Sulfur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.31 to 1.00% Sulfur	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
Greater Than 1.00% Sulfur	0	0	0	85	304	0	523	184	0	339	10	0	0	0	0

Source: See Explanatory Notes on Data Collection and Estimation

Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, July 1984 (Thousand Barrels)

Country	Residual Fuel Oil			
	0.00 to 0.30%	*0.31 to 1.00%*	*Greater Than 1.00%*	Total
Arab OPEC				
Algeria	1,137	710	0	1,847
Iraq	0	0	0	0
Kuwait	0	0	0	0
Libya	0	0	0	0
Qatar	0	0	0	0
Saudi Arabia	0	0	0	0
United Arab Emirates	0	0	0	0
Subtotal Arab OPEC	1,137	710	0	1,847
Other OPEC				
Ecuador	179	0	298	477
Gabon	0	0	0	0
Indonesia	574	14	19	607
Iran	0	0	0	0
Nigeria	0	0	0	0
Venezuela	(s)	350	2,042	2,392
Subtotal Other OPEC	754	364	2,358	3,476
Other				
Angola	0	0	0	0
Australia	519	11	16	545
Bahamas	0	0	0	0
Bolivia	0	0	0	0
Brazil	647	795	0	1,443
Brunei	0	0	0	0
Canada	193	239	685	1,117
Congo	205	190	0	395
Egypt	0	0	0	0
France	299	0	0	299
Ghana	0	0	0	0
Liberia	134	0	0	134
Malaysia	0	0	0	0
Mexico	0	0	303	303
Netherlands	215	215	0	430
Netherlands Antilles	0	0	2,107	2,107
Norway	0	0	0	0
Oman	0	0	0	0
People's Republic of China	0	0	0	0
Peru	0	0	275	275
Puerto Rico	0	0	0	0
Romania	0	0	0	0
Spain	0	0	0	0
Syria	0	0	0	0
Trinidad	443	0	459	902
Tunisia	0	0	0	0
United Kingdom	0	0	0	0
Virgin Islands	1,008	1,503	1,233	3,745
Yugoslavia	0	0	0	0
Zaire	0	0	0	0

See footnotes at end of table

Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, July 1984
(Thousand Barrels)
(continued)

Country	Residual Fuel Oil			
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	Total
Other				
Other Western Hemisphere	7	0	888	895
Other Eastern Hemisphere	(s)	118	456	574
Subtotal Other	3,671	3,071	6,420	13,163
Total Imports	5,562	4,146	8,778	18,486

(s) = Less than 500 barrels.
Note: Total may not equal sum of components due to independent rounding.
Source. See Explanatory Notes on Data Collection and Estimation.

Table 34. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, July 1984
(Thousand Barrels)

State	Residual Fuel Oil			
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	Total
PAD District I	**3,954**	**3,296**	**8,301**	**15,551**
Delaware	0	0	61	61
Florida	0	531	527	1,058
Georgia	0	0	15	15
Maine	1	0	339	340
Maryland	179	97	729	1,005
Massachusetts	514	136	1,228	1,879
New Hampshire	0	0	41	41
New Jersey	753	626	1,786	3,165
New York	2,494	1,152	2,535	6,181
North Carolina	0	0	229	229
Pennsylvania	0	446	60	507
South Carolina	0	0	50	50
Vermont	5	0	(s)	5
Virginia	7	308	700	1,015
PAD District II	**10**	**0**	**38**	**48**
Minnesota	10	0	23	33
North Dakota	(s)	0	2	2
Wisconsin	0	0	13	13
PAD District III	**1,535**	**700**	**271**	**2,506**
Louisiana	490	0	271	761
Texas	1,045	700	0	1,745
PAD District IV	**5**	**0**	**6**	**11**
Montana	5	0	6	11
PAD District V	**58**	**149**	**162**	**369**
California	0	0	6	6
Hawaii	(s)	143	156	300
Oregon	57	0	0	57
Washington	0	6	0	6
All PAD Districts	**5,562**	**4,146**	**8,778**	**18,486**

(s) = Less than 500 barrels
Note: Total may not equal sum of components due to independent rounding
Source: See Explanatory Notes on Data Collection and Estimation

ssary

Definitions of Petroleum Products and Other Terms

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; CH-(CH)n-OH. Alcohol includes methanol and ethanol.

Alkylation. A refinery process for chemically combining isoparaffin with olefin hydrocarbons. The product, alkylate, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

API Gravity. An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Deg API} = \frac{141.5}{\text{sp gr 60F/60F}} - 131.5$$

Aromatics. Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene.

Asphalt. A dark-brown-to-black cement-like material containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Aviation Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

Aviation Gasoline (Finished). All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

Barrel. A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt and wax to barrels are given in the definitions for these products.

Barrels Per Calendar Day. See ***Operable Capacity***.

Barrels Per Stream Day. See ***Operable Capacity***.

Bi-Metallic. A term used to describe a type of catalyst A catalytic process utilizing a catalyst comprised of two metals (e.g. platinum, rhenium).

Butane. A normally gaseous straight-chain or branch-chain hydrocarbon. (C4H10). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is covered by ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

Isobutane. A normally gaseous branch-chain hydrocarbon, (C4H10). It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. It is extracted from natural gas or refinery gas streams.

Normal Butane. A normally gaseous straight-chain hydrocarbon, (C4H10). It is a colorless paraffinic gas that boils at a temperature of 31 1 degrees F. It is extracted from natural gas or refinery gas streams.

Butylene. An olefinic hydrocarbon, (C4H8), recovered from refinery processes.

Catalytic Cracking. The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil.

Catalytic Hydrocracking. A refining process for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. Hydrocracking is an efficient, relatively low temperature process using hydrogen and a catalyst.

Catalytic Hydrotreating. A process for treating petroleum fractions (e.g. distillate fuel oil and residual oil) and unfinished oils (e.g. naphthas, reformer feeds and heavy gas oils) in the presence of catalysts and substantial quantities of hydrogen to upgrade their quality

Catalytic Reforming. The use of controlled heat and pressure with catalysts to effect the rearrangement of certain hydrocarbon molecules without altering their composition appreciably; the conversion of low-octane gasoline fractions into higher octane stocks suitable for blending into finished gasoline, also the conversion of naphthas to obtain a more volatile product of higher octane number.

Conventional. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of a metal and a non-metal (e.g. platinum, alumina).

Coal. A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratifed carbonaceous rocks are either solid or brittle and are highly combustible. In-

cludes lignite, bituminous coal, and anthracite which conform to ASTM Specification D388.

Crude Distillation. The refining process of separating crude oil components by heating and subsequent condensing of the fractions by cooling.

Crude Oil (including Lease Condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite and oil shale. Drip gases are also included, but topped crude oil (residual) oil and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign according to the following:

Domestic. Crude oil produced in the United States or from its "outer continental shelf" as defined in 43 U.S.C. 1331.

Foreign. Crude oil produced outside the United States. Imported Athabasca hydrocarbons are included.

Delayed Coking. A process to produce low Conradson carbon gas oil for catalytic cracking feedstock and for gasoline.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuels.

No. 1 Fuel Oil. A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 400 degrees F. at the 10-percent point and 550 degrees F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

No. 2 Fuel Oil. A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM Specification D396 specifies for this grade distillation temperatures at the 90-percent point between 540 degrees and 640 degrees F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

No. 1 and No. 2 Diesel Fuel Oils. Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D975:

No. 1-D. A volatile distillate fuel oil with a boiling range between 300-575 degrees F. and used in high-speed diesel engines generally operated under variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specification D975.

No. 2-D. A gas oil type distillate of lower volatility with distillation temperatures at the 90-percent point between 540-640 degrees F for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

No. 4 Fuel Oil. A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D975.

Eastern Hemisphere. That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

Electric Energy (Purchased). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ethane. A normally gaseous straight-chain hydrocarbon, (C_2H_6). It is a colorless paraffinic gas that boils at a temperature of – 127.48 degrees F. It is extracted from natural gas and refinery gas streams.

Ethylene. An olefinic hydrocarbon, (C_2H_4), recovered from refinery processes or petrochemical processes.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

Fluid Coking. A thermal process utilizing the fluidized-solids technique for continuous conversion of heavy, low-grade oils into lighter products.

Gasohol. See ***Motor Gasoline (Finished).***

Gas Oil. A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. Derives its name from having originally been used in the manufacture of illuminating gas. Now supplies distillate-type fuel oils and diesel fuel, also cracked to produce gasoline.

Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation or motor gasoline.

Idle Capacity. The component of operable capacity that is not in operation and not under active repairs, but capable of being placed in operation within 30 days; and capacity not in operation but under active repairs that can be completed within 90 days.

Imported Crude Oil Burned As Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported

crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and shale oil.

Isobutane. See ***Butane.***

Isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule. Used to convert normal butane into isobutane, an alyklation process feedstock, and normal pentane and hexane into isopentane and isohexane, high-octane gasoline components.

Kerosene. A petroleum distillate that boils at a temperature between 300-550 degrees F., that has a flash point higher than 100 degrees F. by ASTM Method D56, that has a gravity range from 40-46 degrees API, and that has a burning point in the range of 150-175 degrees F. Included are the two classifications recognized by ASTM D3699: No. 1-K and No. 2-K, and all grades of keresene called range or stove oil which have properties similar to No. 1 fuel oil, but with a gravity of about 43 degrees API and a maximum end-point of 625 degrees F. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

Kerosene-Type Jet Fuel. A quality kerosene product with an average gravity of 40.7 degrees API, and a 10 percent distillation temperature of 400 degrees F. It is covered by ASTM Specification D1655 and Military Specification MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; it is used primarily for commercial turbojet and turboprop aircraft engines.

Lease Condensate. A natural gas liquid recovered from gas well gas (associated and nonassociated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

Liquefied Petroleum Gases (LPG). Ethane, Ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/ or refrigeration they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane. Excludes still gas used for chemical or rubber manufacture which is reported as a petrochemical feedstock and also excludes liquefied petroleum gases intended for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstock or other uses.

Lubricating Oils. A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. "Lubricants" includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include:

Bright Stock. A refined, high viscosity lubricating oil base stock that is usually made from a residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.

Neutral. A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.

Other. A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

Middle Distillates. A general classification that includes distillate fuel oil and kerosene.

Miscellaneous Products. Includes all finished products not classified elsewhere, e.g., petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, specialty oils and medicinal oils.

Motor Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

Motor Gasoline (Finished). A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Specifications for motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a boiling range of 122-158 degrees F. at the 10-percent point to 365-374 degrees F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. "Motor gasoline" includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Leaded Gasoline. Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Unleaded Gasoline. Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blend stock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Gasohol. A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range with an average gravity of 52.8 degrees API and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F, meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military Excludes ram-jet and petroleum rocket fuels.

Natural Gas. A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specification of the Gas Processors Association and the American Society for Testing and Materials and are classified as follows: Ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e. products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gasoline and Isopentane. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, (C5H12), obtained by fractionation of natural gasoline or isomerization of normal pentane.

Normal Butane. See ***Butane.***

OPEC. The acronym for the Organization of Petroleum Exporting Countries, oil-producing and exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

Operable Capacity. The amount of capacity that, at the beginning of the period, is in operation; not in operation, and not under active repairs but capable of being placed in operation within 30 days; or not in operation but under active repairs that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day.

Barrels Per Calendar Day. The maximum number of barrels of input that can be processed in an atmospheric distillation facility during a twenty-four hour period after making allowances for the following limitations:

The capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation.

The types and grades of inputs to be processed.

The types and grades of products expected to be manufactured.

The environmental constraints associated with refinery operations.

The reduction of capacity for scheduled downtime such as routine inspection, mechanical problems, maintenance, repairs and turnaround.

The reduction of capacity for unscheduled downtime such as mechanical problems, repairs, and slowdowns.

Barrels Per Stream Day. The amount a unit can process running at full capacity under optimal crude and product slate conditions.

Operating Capacity. The component of operable capacity that is in operation at the beginning of the period.

Other Hydrocarbons. Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Pentanes Plus. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline and plant condensate.

Petrochemical Feedstock Use. Chemical feedstocks derived from petroleum, principally for the manufacture of chemicals, synthetic rubber and a variety of plastics. The categories reported are "Naphtha-Less than 400 degrees F. end-point" and "Other oils over 400 degrees F. end point."

Naphtha-Less Than 400 Degrees F. End-Point. A naphtha with an end point of less than 400 degrees F. that is intended for use as a petrochemical feedstock.

Other Oils-Over 400 Degrees F. End-Point. Oils with an end point over 400 degrees F. that is intended for use as a petrochemical feedstock.

Petroleum Coke. A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is 5 barrels of 42 U.S. gallons per short ton.

Marketable Coke. Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This "green" coke may be sold as is or further purified by calcining.

Catalyst Coke. In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst thus, deactivating the catalyst The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refinery process. This carbon or coke is not recoverable in a concentrated form.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400 F. end-point, other oils-over 400 F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Refinery. An installation that manufacturers finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Plant Condensate. One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Primary Stocks. Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks excludes stocks of foreign origin that are held in bonded warehouse storage.

Propane. A normally gaseous straight-chain hydrocarbon, (C_3H_8). It is a colorless paraffinic gas that boils at a temperature of -43.67 degrees F. It is extracted from natural gas or refinery gas streams. It includes all products covered by Gas Processors Association Specifications for commercial propane and HD-5 propane and ASTM Specification D1835.

Propylene. An olefinic hydrocarbon, (C_3H_6), recovered from refinery processes or petrochemical processes.

Residual Fuel Oil. The topped crude of refinery operations which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Imports of residual fuel oil include "Imported Crude Oil Burned as Fuel."

Road Oil. Any heavy petroleum oil, including residual asphaltic oil used as a dust pallative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

Special Naphthas. All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees F. "Special naphthas" includes all commercial hexane and cleaning solvents conforming to ASTM Specification D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (Purchased). Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and/or refinery fuel use.

Petrochemical Feedstock Use. Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc. are considered petrochemical products; therefore, only their feedstock equivalents are included.

Fuel Use. All other still gas.

Strategic Petroleum Reserve (SPR). Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

Thermal Cracking. A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking is used to increase the yield of gasoline obtainable from crude oil.

Unfinished Oils. Includes all oils requiring further processing, except those requiring only mechanical blending.

Unfractionated Streams. Mixtures of unsegregated natural gas liquid components excluding those in plant condensate. This product is extracted from natural gas.

Vacuum Distillation. Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid-being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

Visbreaking. A thermal cracking process in which heavy vacuum-still bottoms produced on the primary distillation unit are cracked to increase production of distillate products.

Wax. A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series pre-

dominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42-U.S. gallon barrel.

Microcrystalline Wax. Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics:

Penetration at 77 degrees F. (D1321)-60 maximum. Viscosity at 210 degrees F. in Saybolt Universal Seconds (SUS). (D88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D721)-5 percent minimum.

Crystalline-Fully Refined Wax. A light-colored paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D721)-0.5 percent maximum. Other +20 color, Saybolt minimum.

Crystalline-Other Wax. A paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D721)-0.51 percent minimum to 15 percent maximum.

Western Hemisphere. That half of the earth that includes North and South America and adjacent islands.

Bureau of Mines Petroleum Refining Districts and PAD Districts

The following are the Bureau of Mines petroleum refining districts which make up the PAD districts

PAD District I

East Coast: District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian #1: The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

PAD District II

Appalachian #2: The following counties of the State of Ohio: Erie, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

Indiana—Illinois—Kentucky: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

Minnesota—Wisconsin—North and South Dakota: The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

Oklahoma—Kansas—Missouri: The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

PAD District III

Texas Inland: The State of Texas except the Texas Gulf Coast District.

Texas Gulf Coast: The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

Louisiana Gulf Coast: The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

North Louisiana—Arkansas: The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico: The State of New Mexico.

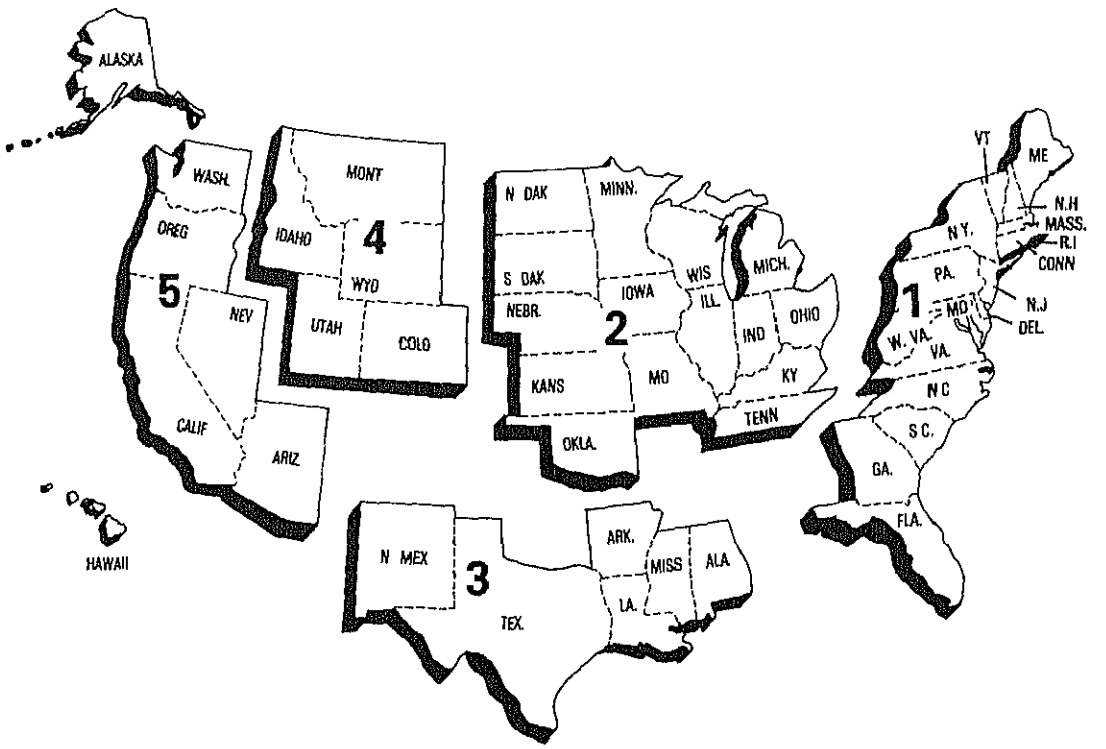
PAD District IV

Rocky Mountain: The States of Montana, Idaho, Wyoming, Utah, and Colorado.

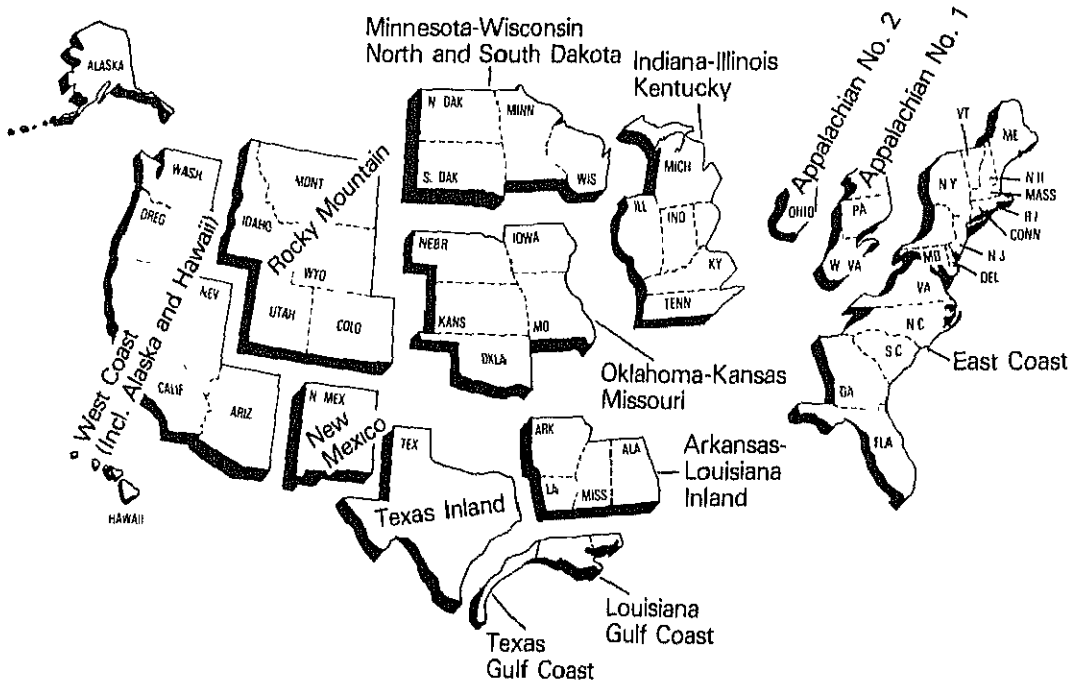
PAD District V

West Coast: The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

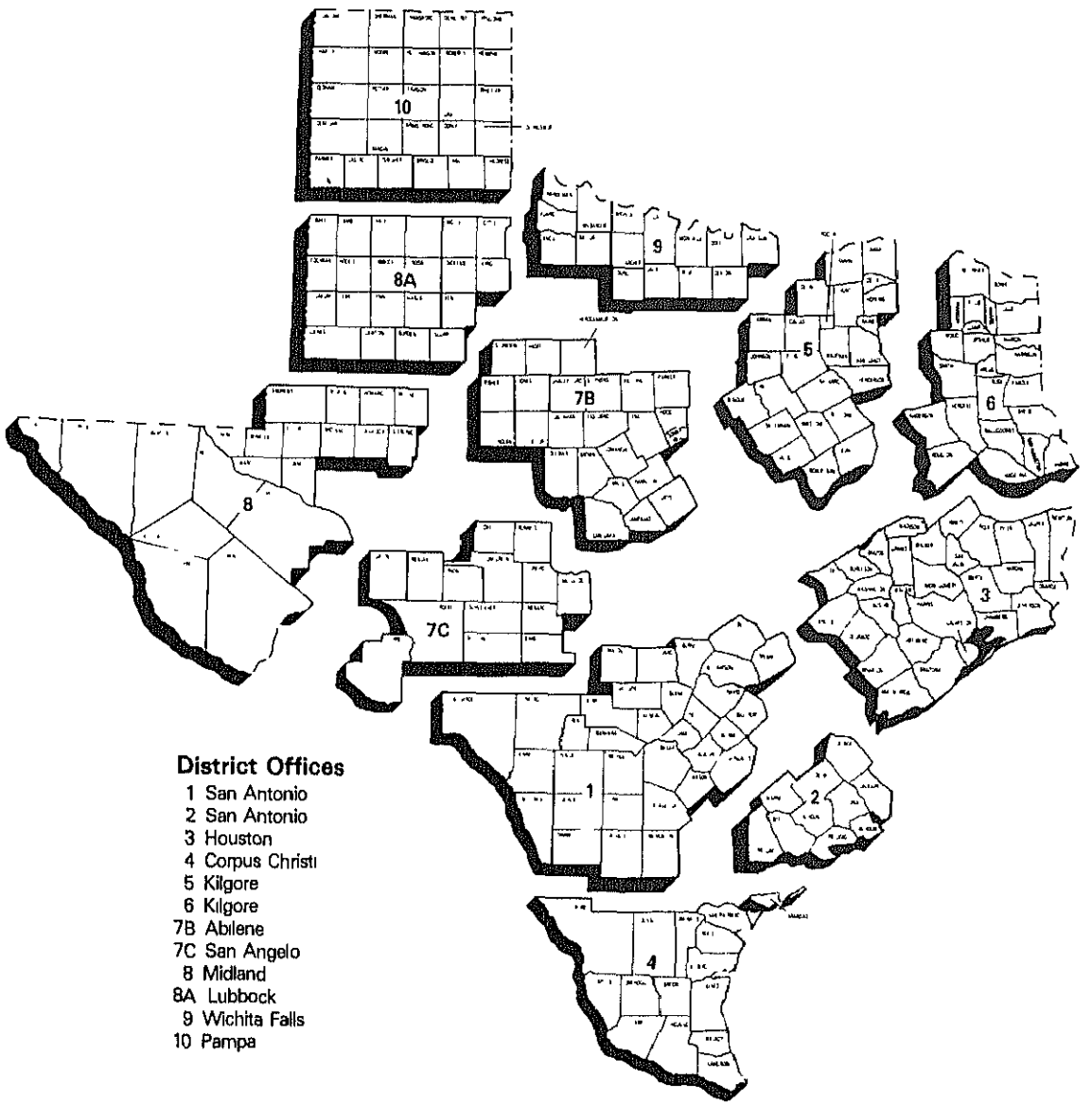
Petroleum Administration for Defense (PAD) Districts



Bureau of Mines Refining Districts



District Map Oil and Gas Division Railroad Commission of Texas



District Offices

1 San Antonio
2 San Antonio
3 Houston
4 Corpus Christi
5 Kilgore
6 Kilgore
7B Abilene
7C San Angelo
8 Midland
8A Lubbock
9 Wichita Falls
10 Pampa

Explanatory Notes

Explanatory Notes

Note 1: Data Collection Methodology

Background

Beginning in January 1983, the Energy Information Administration (EIA) unified its petroleum supply data collection activities into the Petroleum Supply Reporting System (PSRS). The PSRS represents a family of data collection survey forms, data processing systems and publication systems that have been consolidated to achieve comparability and consistency throughout. The primary focus of the consolidation has been to revise the weekly and monthly survey reporting forms to assure consistency in form layout, preparation instructions, and definitions. As a result, a new set of survey forms were implemented in January 1983. The following are the new form numbers and their corresponding predecessor forms:

New Form Number	Name	Old Form Number
EIA-800	Weekly Refinery Report	EIA-161
EIA-801	Weekly Bulk Terminal Report	EIA-162
EIA-802	Weekly Product Pipeline Report	EIA-163
EIA-803	Weekly Crude Oil Stocks Report	EIA-164
EIA-804	Weekly Imports Report	EIA-165
EIA-805	Weekly Shipments from Puerto Rico to the United States Report	—
EIA-810	Monthly Refinery Report	EIA-87
EIA-811	Monthly Bulk Terminal Report	EIA-88
EIA-812	Monthly Product Pipeline Report	EIA-89
EIA-813	Monthly Crude Oil Report	EIA-90
ERA-60	Monthly Imports Report	ERA-60
EIA-815	Monthly Shipments from Puerto Rico to the United States Report	FEA-P133-M-0
EIA-816	Monthly Natural Gas Liquids Report	EIA-64
EIA-817	Monthly Tanker and Barge Movement Report	EIA-170

Forms EIA-800 through 805 comprise the Weekly Petroleum Supply Reporting System (WPSRS). This system is designed to collect basic refinery operations and product stock data for major products on a weekly basis. Data from the WPSRS are published in the *Weekly Petroleum Status Report (WPSR)* and are also used to calculate the preliminary statistics in the "Summary Statistics" section of the *Petroleum Supply Monthly* (*PSM*). A description of the WPSRS survey forms follows in Note 1.1.

Forms EIA-810-813, 815-817 and ERA-60 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery operations data, refinery, bulk terminal and pipeline stocks data, crude oil and petroleum product imports data and movements of petroleum products and crude oil between PAD Districts data. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the *PSM*. A description of MPSRS survey forms follows in Note 1.2.

Data are also obtained in magnetic tape form from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the *PSM*. A description of the Census data follows in Note 1.3.

Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 in response to the Iranian oil crisis. Initially, the published data were taken from the American Petroleum Institute (API) *Weekly Statistical Bulletin*. However, in January 1980 the EIA began to publish weekly statistics from its own surveys, with the exception of imports statistics which the EIA did not begin collecting until June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. On Form EIA-805, a company shipping unfinished oils and finished petroleum products into the United States from Puerto Rico reports each shipment. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report.*

Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

EIA-800: Based on the EIA-810 universe, which includes all petroleum refineries in the United States and

its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and plants that produce finished motor gasoline through mechanical blending. The selected sample size is 215.

EIA-801: Based on the EIA-811 universe, which includes all bulk terminal facilities in the United States and its territories that have either a total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The selected sample size is 93.

EIA-802: Based on the EIA-812 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies that transport products covered in the weekly survey are included. The selected sample size is 65.

EIA-803: Based on the EIA-813 universe, which consists of all companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

EIA-804: Based on the ERA-60 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico. The selected sample size is 65

EIA-805: Based on the EIA-815 universe, which includes all shippers of unfinished oils and petroleum products into the United States from Puerto Rico. Four companies report.

Sampling Method

The cut-off method is the sampling procedure used for all weekly surveys except the EIA-802, which uses the monthly universe in its entirety. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous 12-month period. Companies are chosen for the sampling, beginning with the largest and adding companies until the total sample covers 90 percent of the total for the previous time period for each product published in the *Weekly Petroleum Status Report.*

Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period closes each Friday at 7 a.m. All canvassed firms and terminal operations companies must file by 5 p.m. on the following Monday.

Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month (M_t) is divided by the amount reported by the sample of companies for the most recent month (M_s). The result is multiplied by the amount reported by the sample of companies for the current week (W_s). The answer, W_t, is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s}(W_s)$$

This procedure is used to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratio multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for unlicensed products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

Response Rates

The response rate for the published estimates is usually between 95 and 98 percent.

Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems

were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movements of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

Respondent Frame

EIA-810: All petroleum refineries and plants that produce finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, the Hawaiian Foreign Trade Zone, and Guam. Approximately 313 respondents report on the EIA-810.

EIA-811: All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have a total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline, regardless of ownership of the material. Approximately 328 respondents report on the EIA-811.

EIA-812: All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 94 respondents report on the EIA-812.

EIA-813: All companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

EIA-815: All licensed importers and importers of record shipping petroleum products from Puerto Rico into the 50 States and the District of Columbia.

Import data from the ERA-60 and EIA-815 are integrated into the import statistics reported in the *PSM*.

EIA-816: All operators of facilities designed to extract liquid hydrocarbons from natural gas stream (natural gas processing plants) or to separate a hydrocarbon stream into its component products, i.e., propane, butane, natural gasoline, etc. (fractionators). Approximately 990 respondents report on the EIA-816.

EIA-817: All known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are about 50 respondents.

ERA-60: All licensed importers and importers of record importing crude oil and petroleum products into the United States and Puerto Rico. The respondent universe consisted of approximately 1,100 firms as of July 31, 1982. However, only a selected 250 importers must report each month regardless of import activity. All others must report only for a month in which they actually had imports. The respondent universe for this survey is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *LP Gas Almanac* for information on facilities or companies going into operation or closing down. These are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Periodically an extensive survey study is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th day following the end of the report month, with the exception of the EIA-815 and ERA-60 which are due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

Imputing Missing Data

Imputation is performed only for nonresponding companies that submitted reports the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by submission of actual data. Data for nonrespondents on the EIA-815 and 817, and ERA-60 are not imputed.

Response Rates

As of the filing deadline, the response rates of the EIA-810 through EIA-813 respondents is over 90 per-

cent. The response rate for the EIA-816 is over 85 percent and for the EIA-817 it is 98 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Names of companies that fail to file for 2 consecutive months are forwarded for further noncompliance action.

In July 1983, the ERA-60 survey had a response rate of 99.9 percent by the filing deadline. The universe was 1,100 firms at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard follow-up of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. In addition, response is cross-checked with response on the Petroleum Licensing Decrementation System (PLDS), a listing of each month's importers. The response rate is generally 98 to 99 percent by the time the data are first published.

Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data provide the only source of export statistics and are used to augment the import data collected by the EIA. Export statistics and import data from the Census tapes on liquefied petroleum gases and bonded ship bunkers are published in the *PSM*.

Import Statistics (IM-145)

Coverage

The import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.

2. Shipments from anywhere to U.S. possessions and shipments from U.S. possessions to the United States. (U.S. possessions include Puerto Rico, the Virgin Islands, Guam, and American Samoa.)

3. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

Imported petroleum is reported as *Imports for Consumption*. Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

Export Statistics (EM-522 and EM-594)

Coverage

The export statistics reflect both government and nongovernment exports of domestic and foreign merchandise from the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. All shipments from U.S. possessions, regardless of whether the shipments are sent to the United States, to other U.S. possessions, or to foreign countries.

2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.

3. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Exporters are required to file Shipper's Export Declarations with Custom's officials. The only exceptions are those exporters who have been authorized to submit data directly to the Bureau of Census on magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations.

Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

Note 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

Field Production is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation and revenue agencies. For further explanation, see Explanatory Note 3.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-816, *Monthly Natural Gas Liquids Report*. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.2.

Refinery Production of petroleum products is reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month.

Imports of crude oil and petroleum products are reported monthly on Form ERA-60, *Report of Oil Imports Into the United States and Puerto Rico*, and Form EIA-815, *Shipments of Refined Products (Including Unfinished Oils) from Puerto Rico to the United States*. In addition, the Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501, 7505, and 7506. The most prominent difference between the EIA and Census systems appears in imports of liquefied petroleum gases (LPG), where the Census data show a much higher level of imports than EIA data. This occurs because the ERA-60 respondent frame was built by monitoring importers of licensed products and LPGs are not licensed products. Therefore, respondents that import only LPGs have not been identified, and do not report these imports to the Department of Energy. Since these importers are required to file form 7501 with the U.S. Customs Service, EIA obtains data on imports of LPGs from Census Tabulation IM-145 Additional data taken from the IM-145 are relatively small quantities of naphtha- and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the ERA-60 reporting system.

Stock Withdrawal (+) or Addition (−) is calculated by subtracting stocks at the end of the month from stocks at the beginning of the same month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks and an increase in petroleum supplies distributed for domestic consumption. A negative result (−) would represent a buildup of stocks and a reduction in the amount of petroleum supplies distributed for domestic consumption. For a description of survey forms used to make stock withdrawal or addition calculations see Explanatory Note 5.

Unaccounted-for Crude Oil is a balancing item that represents the difference between crude oil supply and disposition.

Crude oil supply is the sum of field production, imports and stock withdrawals or additions. Crude oil disposition is the sum of exports, refinery input, losses and product supplied. Unaccounted-for crude oil is calculated by subtracting crude oil supplies from crude oil disposition. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used.

Note 3: Domestic Crude Oil Production

Data for the Crude Oil Production System (COPS) are reported to the Department of Energy by each of the State conservation agencies, which collect crude oil production values for tax purposes. The U.S. Geological Survey reports the volume of crude oil that is produced offshore in Federally-owned waters. With the exception of ten State conservation agencies, all of these reports are received monthly. After each calendar year, these monthly numbers are updated using the annual reports

from the State conservation agencies and the U.S. Geological Survey. The ten States that do not report monthly values are Indiana, Kentucky, Missouri, Arkansas, Utah, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly COPS information becomes available. Table 11 of this publication provides information on crude oil production for the most recent month for which COPS values are available. In order to present more timely crude oil production values, the EIA's Dallas Field Office prepares a series of State level estimates which are based on historical production patterns and are summed to obtain the monthly crude oil production values shown in the summary statistics of this publication.

The individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. In some cases, adjustments are made to these estimates based on additional information on expected changes in production rates supplied by a State agency, a trade association, or an individual field operator.

Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

Crude Oil Losses is the sum of crude oil losses at refineries. Crude oil losses at refineries are reported on Form EIA-810, *Refinery Report*.

Refinery Inputs of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

Exports of crude oil and petroleum products are compiled from Census Bureau tabulations EM-522 and EM-594. Exports include crude oil shipments to Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone, which are obtained from refinery receipts reported on Form EIA-810, by refineries located in these places.

Product Supplied for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, minus crude oil losses (plus net receipts when calculated on a PAD District basis), minus refinery input, minus exports. This formula ensures that total disposition equals total supply.

Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) data were misreported or reported late, (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on Form EIA-813, *Monthly Crude Oil Report*. Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form EIA-800, *Weekly Refinery Report*, and on Form EIA-803, *Weekly Crude Oil Stocks Report*. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-810, *Monthly Refinery Report*, Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report*. Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-800, *Weekly Refinery Report*, Form EIA-801, *Weekly Bulk Terminal Report*, and Form EIA-802, *Weekly Crude Oil Stocks Report*. For survey descriptions and other details, see Explanatory Notes 1.1 - 1.3.

Note 6: Average Stock Levels

The graphs displaying monthly stock levels of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, liquefied petroleum gases, and other products provide the user with recent data as well as a summary of data from January through December or from July through June for the most recent 3-year period. This summary takes the form of an *average range* that includes seasonal variation determined from a longer time period. The

average range represents the historical pattern; it is not a forecast.

These curves are updated semiannually (On April 1 and October 1), by basing the *average ranges* on a more recent time period. Each 3-year data series is adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive. The series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels. The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. For crude oil stocks, the derived seasonal factors are very small relative to crude oil stock levels. Therefore, the seasonal factors for distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products are derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors are based on monthly data from 1975, 1976, 1978, 1979 and 1980. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1973, 1974 and 1977 were not representative of the recent past, and these years were not used in the determination of seasonal patterns for motor gasoline stocks. Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for crude oil, distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent 3-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the *average range* is twice this standard error.

The upper curve of the *average range* is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Forms EIA-817, *Monthly Tanker and Barge Movement Report*, and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other detail, see Explanatory Note 1.2.

Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the *Summary Statistics* section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

Note 9: Notes on Tables

Note 9.1 Crude Oil and Petroleum Products Overview statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (−), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

• Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.

• Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.

• Total Crude Oil and Petroleum Products Ending Stocks appear in thousand barrels in Table 2.

Note 9.2 Crude Oil Supply and Disposition statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

• Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (−), Unaccounted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

• Crude Losses and Product Supplied appear as labeled in Table 4.

• SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousand barrels in Table 1.

• Total Crude Oil Ending Stocks appear in thousand barrels in Table 2.

• Total Imports appear in Table 4.

Note 9.3 Finished Motor Gasoline Supply and Disposition statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

• Total Production is the sum of Field Production and Refinery Production in Table 4.

• Imports, Stock Withdrawal (+) or Addition (−), Exports, and Product Supplied appear as labeled in Table 4.

• Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

• Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

• Total Production is the sum of Field Production and Refinery Production in Table 4.

• Imports, Stock Withdrawal (+) or Addition (−), Exports, and Product Supplied appear as labeled in Table 4.

• Ending Stocks appear in thousand barrels in Table 2.

Note 9.5 Liquefied Petroleum Gases Supply and Disposition statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

• Total Production is the sum of Field Production and Refinery Production in Table 4.

• Imports, Stocks Withdrawal (+) or Addition (−), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

• Ending stocks appear in thousand barrels in Table 2.

Note 9.6 Other Petroleum Products Supply and Disposition statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

• Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.

• Imports, Stock Withdrawal (+) or Addition (−), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

• Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

Note 9.7 Table 1. U.S. Petroleum Balance

• Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska*, *Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

• Line (5): *SPR Imports* are reported on Survey Form ERA-60.

• Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (−) plus unaccounted for crude oil minus crude losses in Table 2.

• Line (14): Natural gas plant liquids (NGPL) *Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

• Line (15): NGPL *Imports* equals the sum of the im-

ports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.

• Line (16): NGPL *Stock Withdrawal (+) or Addition (−)* is equal to the sum of stock withdrawal (+) or addition (−) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.

• Line (17) equals the sum of lines (14), (15), and (16).

• Line (18). Unfinished oils and gasoline blending components *Stock Withdrawal (+) or Addition (−)* equals stock withdrawal (+) or addition (−) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.

• Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.

• Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

• Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

• Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (−) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (−) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

• Line (25): *Gross Imports of Refined Products* equals imports of LPG plus imports of finished petroleum products in Table 2.

• Line (26): *Exports of Refined Products* equals exports of LPG plus exports of finished petroleum products in Table 2.

• Line (27): *Net Imports of Refined Products* equals the difference between lines (25) and (26).

• Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (−) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (−) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.

• Line (29): *Refined Products Stocks Withdrawal (+) or Addition (−)* equals the sum of stock withdrawal (+) or addition (−) for LPG and finished petroleum products in Table 2.

• Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.

• Lines (31) through (35) equal the respective products supplied in Table 2.

• Line (36): *Other Products Supplied* equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock use, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components and miscellaneous products supplied in Table 2.

• Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.

• The sum of lines (38) and (39), stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve*, equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-813.

• Line (43): stocks of *Refined Products*, equals the sum of LPG and finished petroleum product stocks in Table 2.

Note 10: New Stock Basis

In January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock withdrawal calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been:

• Crude Oil: 1982 - 645 (Total) and 351 (Other Primary).

• Crude Oil and Petroleum Products: 1974 - 1,121; 1980 - 1,420; and 1982 - 1,462.

• Motor Gasoline: 1974 - 225; 1980 - 263; 1982 - 244 (Total) and 203 (Finished).

- Distillate Fuel Oil: 1974 - 224; 1980 - 205, and 1982 - 186.

- Residual Fuel Oil: 1974 - 75, 1980 - 91, and 1982 - 68

- Liquefied Petroleum Gases: 1974 - 113; 1980 - 128; and 1982 - 103.

- Other Petroleum Products: 1974 - 220; 1980 - 249; and 1982 - 259.

- Stock withdrawal calculations beginning in 1975, 1981, 1983 were made using new basis stock levels.

In January 1984, changes were made in the reporting of natural gas liquids. As a result, unfractionated stream, which was formerly included in "Other Petroleum Products Supply and Disposition" table in the Summary Statistics, is now reported on a component basis (ethane, propane, normal butane, isobutane and pentanes plus). Most of these stocks will now appear in the "Liquefied Petroleum Gases Supply and Disposition" table of the Summary Statistics. This change will affect stocks reported and stock withdrawals in each table. Under the new basis, end-of-year 1983 stocks, in million barrels, would have been:

- Liquefied Petroleum Gases: 1983 - 108

- Other Petroleum Products: 1983 - 248

Note 11: Stocks of Alaskan Crude Oil

Stocks of Alaskan crude oil in transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock withdrawal calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Other Primary).

Note 12: Changes in Petroleum Industry Reporting

Petroleum statistics contained in this report for all years through 1980 were developed using definitions, concepts, reporting procedures and aggregation methods that are consistent with those developed by the U.S. Bureau of Mines. Research conducted by the Energy Information Administration in 1979 and 1980 indicated that changes had occurred in the petroleum industry that were not being adequately reflected in EIA's reporting systems.

EIA reporting forms, definitions, and procedures were modified beginning in January 1981 to describe industry operations more accurately. Unfortunately, empirical information is not available to precisely measure the data shortcomings throughout 1980. However, estimates of the magnitudes of differences in the major data series are described below to form a basis for comparing 1979, 1980, and 1981 data.

Motor Gasoline

Prior to 1979, the EIA product-supplied series for motor gasoline was consistently about 2 percent lower than the Federal Highway Administration (FHWA) gasoline-sales data series, which is derived from State tax receipts. This difference increased to about 4 percent in 1979 and 5 percent in 1980. There are two primary causes for this growing difference. First, refinery operations, particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA until the data system was changed in January 1981.

Quantitative estimates of the magnitude of the difference—in EIA's gasoline product supplied data in 1979 and 1980 have been made by the EIA and the American Petroleum Institute (API). The following table provides 1979 and 1980 data as published in the *Petroleum Statement Annual*, as well as EIA and API estimates of "recast" motor gasoline product supplied. EIA recast estimates were based upon preliminary monthly information in the *Monthly Petroleum Statement*. The ranges displayed in the EIA column reflect uncertainty in the estimates. Also shown are the FHWA motor gasoline sales statistics for those years. EIA has recently published a study of the quality of these FHWA data.[1]

[1]Office of Energy Information Validation, Energy Information Administration, U.S. Department of Energy, *Error Profile of the Motor Fuel Taxation Data used to Establish and Monitor State Emergency Conservation Targets* (Washington, D.C: December, 1981).

Finished Motor Gasoline Product Supplied on Old and New Basis (Thousand Barrels per Day)

	1979				1980			
	EIA Reported	API Recast	EIA Recast	FHWA[1]	EIA Reported	API Recast	EIA Recast	FHWA[1]
Jan	6,830	7,230	7,084-7,246	6,984	6,323	6,789	6,630-6,791	6,672
Feb	7,254	7,496	7,389-7,568	7,538	6,596	6,983	6,831-7,003	6,830
Mar	7,229	7,414	7,301-7,463	7,316	6,406	6,753	6,607-6,768	6,713
Apr	7,055	7,300	7,187-7,353	7,375	6,800	7,014	6,886-7,052	6,981
May	7,213	7,429	7,313-7,475	7,428	6,729	6,954	6,823-6,984	7,044
Jun	7,191	7,483	7,350-7,516	7,441	6,657	6,966	6,824-6,991	7,049
Jul	6,902	7,241	7,105-7,266	7,299	6,743	6,973	6,960	7,132
Aug	7,330	7,546	7,426-7,588	7,619	6,648	6,841	6,828	7,090
Sep	6,881	7,122	7,016-7,262	7,232	6,510	6,692	6,962	6,685
Nov	6,791	7,068	6,956-7,122	7,142	6,234	6,507	6,516	6,951
Dec	6,730	7,106	6,966-7,127	7,064	6,632	6,948	6,936	6,993
Average	7,034	7,302	7,183-7,347	7,309	6,579	6,882	6,806-6,889	6,925

[1]FHWA gasoline statistics published in their 1979 Table MF-33G, 08-06-80, contain aviation gasoline as well as motor gasoline. Only motor gasoline data are included in published 1980 data. Consequently, the 1979 data shown above were reduced by subtracting aviation gasoline product supplied quantities as published by EIA in the 1979 *Petroleum Statement Annual*. The 1980 FHWA data published in their 1980 Table MF-33GA, August 1981, did not require this adjustment

Distillate and Residual Fuel Oil

Distillate and residual fuel oil refinery production statistics through 1980 were adjusted to account for an imbalance between unfinished oil supply and disposition. The reported quantities of refinery inputs of unfinished oils typically exceed the available supply of unfinished oils. It has been assumed that this occurs when distillate and residual fuel oil produced by a refinery is shipped to another refinery, where it is treated as unfinished oil. This oil is then reprocessed rather than used or sold as distillate or residual fuel oil.

For many years (including 1980), the difference between unfinished oil disposition and supply was subtracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate, and one-third to residual fuel oil.

Beginning in January 1981 this adjustment was discontinued because there was not sufficient empirical evidence to support it. The following table presents distillate and residual fuel oil refinery production in 1980 as published (adjusted) and on the same basis as 1981 statistics are now being completed (unadjusted) to permit comparison between 1980 and 1981 data series. Adjusted distillate and residual fuel oil product supplied volumes differ from the unadjusted volumes by the same amounts as the adjusted and unadjusted production volumes.

Adjusted and Unadjusted Refinery Production, and Unadjusted Product Supplied of Distillate and Residual Fuel Oils, by Month for 1979 and 1980 (Thousand Barrels Per Day)

1979

Month	Distillate Fuel Oil				Residual Fuel Oil			
	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied
Jan.	3,043	3,108	65	4,646	1,912	1,946	34	3,594
Feb.	2,888	2,945	57	4,869	1,792	1,822	30	3,625
Mar.	3,019	3,026	7	3,671	1,719	1,723	4	3,243
Apr.	2,945	2,978	32	3,048	1,639	1,656	17	2,524
May	3,066	3,093	27	3,025	1,586	1,600	14	2,517
Jun.	3,153	3,187	35	2,743	1,548	1,566	18	2,601
Jul.	3,305	3,344	38	2,601	1,575	1,594	20	2,471
Aug.	3,321	3,359	38	2,799	1,584	1,603	20	2,570
Sep.	3,354	3,306	−48	2,599	1,627	1,602	−25	2,584
Oct.	3,251	3,217	−34	3,085	1,629	1,612	−17	2,523
Nov.	3,239	3,200	−39	3,208	1,736	1,716	−20	2,795
Dec.	3,221	3,238	17	3,725	1,894	1,903	9	3,022
Average	3,152	3,169	16	3,327	1,687	1,695	8	2,834

1980

Month	Distillate Fuel Oil				Residual Fuel Oil			
	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied
Jan.	3,013	3,093	80	3,794	1,771	1,812	41	3,108
Feb.	2,766	2,888	122	3,834	1,773	1,836	63	3,168
Mar.	2,557	2,690	133	3,312	1,584	1,652	68	2,726
Apr.	2,460	2,554	94	2,729	1,595	1,643	48	2,492
May	2,474	2,610	136	2,538	1,509	1,579	70	2,305
Jun.	2,646	2,721	75	2,392	1,575	1,613	38	2,359
Jul.	2,689	2,783	94	2,343	1,480	1,528	48	2,339
Aug.	2,461	2,582	121	2,258	1,444	1,506	62	2,348
Sep.	2,686	2,726	40	2,627	1,495	1,516	21	2,380
Oct.	2,589	2,650	61	2,981	1,512	1,543	31	2,258
Nov.	2,703	2,823	120	3,069	1,579	1,641	62	2,513
Dec.	2,891	3,052	161	3,776	1,660	1,743	83	2,762
Average	2,661	2,764	103	2,969	1,580	1,634	54	2,562

Total Petroleum Products

The imbalance between the supply and disposition of unfinished oils and gasoline blending components is included with other products (line 35) in the U.S. Petroleum Balance (Table 1). These imbalances are reported as negative product supplied in the Other Liquids section, Supply and Disposition Statistics (Table 2). Since these changes only involve redistribution of the volumes of gasoline, distillate and residual fuel oil, gasoline blending components, and unfinished oils, the total volume of petroleum products supplied remains unaffected by them.

Note 13: NGL Import/Export Algorithms

Beginning in January 1984, the Energy Information Administration (EIA) implemented changes in the reporting of natural gas liquid (NGL) supply data, moving from a nine-product slate to a five-component slate that corresponds to industry record-keeping practices. Changes could not be made to the import and export systems. Therefore, in order to allocate imports and exports of mixed NGL streams to individual component parts, the EIA developed a statistical algorithm.

Imports

The imports algorithm is based on information gathered from the larger importers of NGL, who were asked to provide component analyses of the products they imported during the first six months of 1983. The percentages shown in Exhibit 1 are derived from the weighted averages of the data provided by the importers.

EXHIBIT 1. ALGORITHMS FOR ALLOCATING NGL IMPORTS

PRODUCT SLATE	*Ethane*	*Propane*	*Normal butane*	*Isobutane*	*Pentanes Plus*
Natural Gasoline & Isopentane (EIA-814)					100%
Plant Condensate (EIA-814)					100%
Ethane (IM-145)	100%				
Butane (IM-145)			60%	40%	
Butane-Propane Mixtures (IM-145)		40%	35%	20%	5%
Ethane-Propane Mixtures (IM-145)	80%	20%			

Exports

The export algorithm is based on information gathered from the larger exporters of NGL, who were asked to provide component analyses of the products they exported during 1983. The percentages shown in Exhibit 2 are derived from the weighted averages of the data provided by the exporters. It was necessary to derive percentages by PAD of exportation, due to the wide variation of components in the mixed streams.

EXHIBIT 2. ALGORITHMS FOR ALLOCATING NGL EXPORTS

		EIA Component Slate				
PRODUCT	*P.A.D.*	*Ethane*	*Propane*	*Normal Butane*	*Isobutane*	*Pentanes Plus*
Ethane	All	100%				
Propane	All		100%			
Butane	All			100%		
Mixed Streams	I, IV, V		40%	60%		
	II	30%	25%	15%	15%	15%
	III		80%	20%		

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